Pioneer sound.vision.soul

# Operation Manual

NAVIGATION AV SYSTEM

# AVIC-F900BT

Be sure to read “Important Information for the user” first!
“Important Information for the user” includes the important information that you must understand before using this navigation system.

Bluetooth®

*English*

## *Thank you* for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. *After you have finished reading the instructions, keep this manual in a safe place for future reference.*

**Important**

The screens shown in the examples may differ from the actual screens.
The actual screens may be changed without notice for performance and function improvements.

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# Manual overview

Before using this product, be sure to read "Important Information for the user" (a separate manual) which contains warnings, cautions, and other important information that you should note.

This manual provides important information you need to make full use of your new navigation system.
The beginning chapters outline this navigation system. The later chapters describe the details of the navigation functions.
Chapter 7 describes the operations related to hands-free phoning by using a mobile phone featuring Bluetooth® technology.
Chapter 8 to Chapter 19 describe how to control the AV sources. Please read these chapters when you use the various functions in the built-in audio and visual source or operate the audio equipment connected to the navigation system.
Chapter 21 describes how to change the settings so as to suit your tastes. The behaviour of your navigation system depends the settings for navigation and audio-visual functions.

## How to read this manual

### Finding the operation procedure from what you want to do

When you have decided what you want to do, you can find the page you need from the "**Contents**".

### Finding the operation procedure from a menu name

If you want to check the meaning of each item displayed on the screen, you will find the necessary page from the "*Display information*" at the end of the manual.

### Glossary

See the glossary to find the meaning of a term.

## Terminology

Before moving on, take a few minutes to read the following information about the conventions used in this manual. Familiarity with these conventions will help you greatly as you learn how to use your new equipment.

- Buttons on your navigation system are described in **ALL CAPITAL**, **BOLD** lettering:
  e.g.)
  **MENU** button, **MAP** button.
- Items in different menus, screen titles, and functional components are described in **bold** with double quotation marks " ":
  e.g.)
  "**Destination Menu**" screen or "**AV Source**" screen
- Touch panel keys that are available on the screen are described in **bold** in brackets [ ]:
  e.g.)
  [**Destination**], [**Settings**].
- Extra information, alternatives and other notes are presented in the following format:
  e.g.)
  ❒ If the home location has not been stored yet, set the location first.
- References are indicated like this:
  e.g.)
  ➲ For details, refer to *Setting your home position* on page 119.

## About the definition of terminology

### "Front Display" and "Rear Display"

In this manual, the screen that is attached to the body of this navigation unit will be referred to as the "Front Display". Any additional optional screen that is purchased for use in conjunction with this navigation unit will be referred to as the "Rear Display".

### "Video image"

"Video image" in this manual indicates the moving images of DVD-Video, DivX, iPod, and any equipment that is connected to this system with an RCA cable, such as general-purpose AV equipment.

### "External storage device (USB, SD)"

The SD memory card, SDHC memory card, USB memory device and USB portable audio player are collectively referred to as the "external storage device (USB, SD)". If it indicates the USB memory and USB portable audio player only, they are referred to as the "USB storage device". ■

## Features

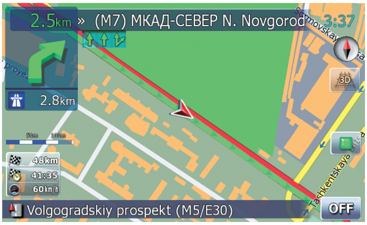
### Touch panel key operation

It is possible to operate the navigation and audio functions by using the touch panel key.

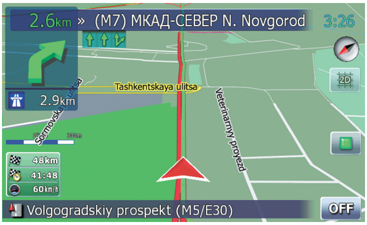
### 2D and 3D map view modes

Various types of screen displays can be selected for navigation guidance.

**2D map screen**


2.5km » (M7) МКАД-СЕВЕР N. Novgorod
3:37
2.8km
3D
48km
41:35
60km/h
Tashkentskaya
Volgogradskiy prospekt (M5/E30)
OFF

**3D map screen**


2.6km » (M7) МКАД-СЕВЕР N. Novgorod
3:26
2.9km
Tashkentskaya ulitsa
Sormovskaya ulitsa
Veterinarnyy proyezd
2D
48km
41:48
60km/h
Volgogradskiy prospekt (M5/E30)
OFF

### A wide variety of Points of Interest (POI) information

More than 100 types of POI categories are included in the database. You can also create your own customised POIs and categories.

### Auto reroute function

If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.

❒ This function may not work under certain conditions.

### Assign your original image as a splash screen

You can store your own pictures on an external storage device (USB, SD) in JPEG or BMP format and import an original splash screen to this navigation system. These imported images can be set up as customised splash screens.

❒ Imported original images will be stored in the built-in memory, but the ability to save these images cannot be guaranteed completely. If your original image data is deleted, set the external storage device (USB, SD) again and re-import the original image.

### A wide variety of playable file formats

- **Built-in DVD drive**
  DVD-Video (commercial-release DVD-Video), DVD-R/-RW/-R DL (DVD-Video, DVD-VR, Data<MP3, WMA, AAC, DivX>), CD (commercial-release audio CD), CD-R/-RW (CD-DA, Data<MP3, WMA, AAC, DivX>)
- **External storage device (USB, SD)**

Following file types is playable on the external storage device (USB, SD).
MP3, WMA, AAC, WAV, MPEG-4, AVI

— **Notice regarding video viewing**
Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights as protected by the Copyright Law.

— **Notice regarding DVD-Video viewing**
This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorised by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorised by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

— **Notice regarding MP3 file usage**
Supply of this navigation system conveys only a licence for private, non-commercial use and does not convey a licence nor imply any right to use this product in any commercial (i.e. revenue-generating), real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent licence for such use is required. For details, please visit http://www.mp3licensing.com.

### Auto file name listing

The track name will be automatically listed when this function is available. This system provides easy-to-operate audio functions that allow playback simply by selecting an item from the list.

### Station name auto display

While tuning in to an RDS station, you can display a list of the stations that you are receiving with the programme service names. This facilitates selection of stations.

❒ If the system cannot receive the programme service name, the frequency will be displayed instead.

### Hands-free phoning

A mobile phone featuring Bluetooth® technology can be connected wirelessly.

— The mobile phone used must be compatible with the profile of this navigation system.

— When using Bluetooth wireless technology, this navigation system may not be able to operate all of the functions on the mobile phone.

### iPod® compatibility

This product supports only the following iPod models and iPod software versions. Others may not be work correctly.

- iPod nano first generation; Ver. 1.3.1
- iPod nano second generation; Ver. 1.1.3
- iPod nano third generation; Ver. 1.1
- iPod fifth generation; Ver. 1.3
- iPod classic; Ver. 1.1.1
- iPod touch; Ver. 1.1.4

❒ When you use this navigation system with a Pioneer USB interface cable for iPod (CD-IU230V) (sold separately), you can control an iPod compatible with this navigation system.

❒ To obtain maximum performance, we recommend that you use the latest software for the iPod.

❒ Operations may vary depending on the iPod models and the software version of iPod.

❒ For more details about iPod compatibility with this navigation system, refer to the information on our website.

❒ iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

### Rear display entertainment

Video sources can be displayed on the rear display.

— "Video image" that is output from the built-in DVD drive (**DVD-V**, **DVD-VR**, **DivX**) and AV input (**AV1**, **AV2**) can be displayed on the rear display.

### Rear view camera ready

You can display what is behind the vehicle if connected to a rear view camera (e.g. ND-BC2) (sold separately). ▣

# Map coverage

For more details about the map coverage of this navigation system, refer to the information on our website. ▣

# Protecting the LCD panel and screen

❒ Do not allow direct sunlight to fall on the LCD screen when this product is not being used. Extended exposure to direct sunlight can result in LCD screen malfunction due to the resulting high temperatures.

❒ When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of spots, coloured stripes, etc.

❒ To protect the LCD screen from damage, be sure to touch the touch panel keys with your finger. (The stylus is supplied for special calibrations. Do not use the stylus for normal operations.) ▣

# Viewing the LCD comfortably

Due to its construction, the viewing angle of the LCD screen is limited. However, "**Brightness**" may be used to adjust the black density of the video. When using the screen for the first time, the adjustment of the black density for clear viewing is recommended. ▣

# Notes for internal memory

## Before removing the vehicle battery

If the battery is disconnected or discharged, the memory will be erased and must be reprogrammed.

❒ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.

  ➲ For more detailed information about the items to be deleted, refer to *Returning the navigation system to the default or factory settings* on page 133.

## About the data being deleted

The information is erased by pressing **RESET** button or disconnecting the yellow lead from the battery (or removing the battery itself). However, some items remain.

❒ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.

  ➲ For more detailed information about the items to be deleted, refer to *Returning the navigation system to the default or factory settings* on page 133.

## Resetting the microprocessor

**⚠ CAUTION**

Pressing **RESET** button clears the settings for the AV source without clearing all the navigation function items. Please refer to the related section before clearing.

➲ For more detailed information about the items to be deleted, refer to *Returning the navigation system to the default or factory settings* on page 133.

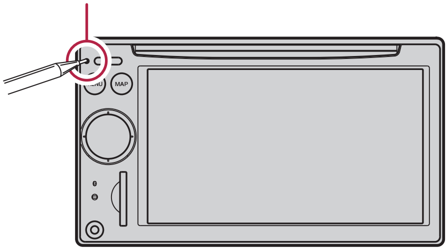
The microprocessor must be reset under the following conditions:

- Prior to using this product for the first time after installation.
- If the product fails to operate properly.

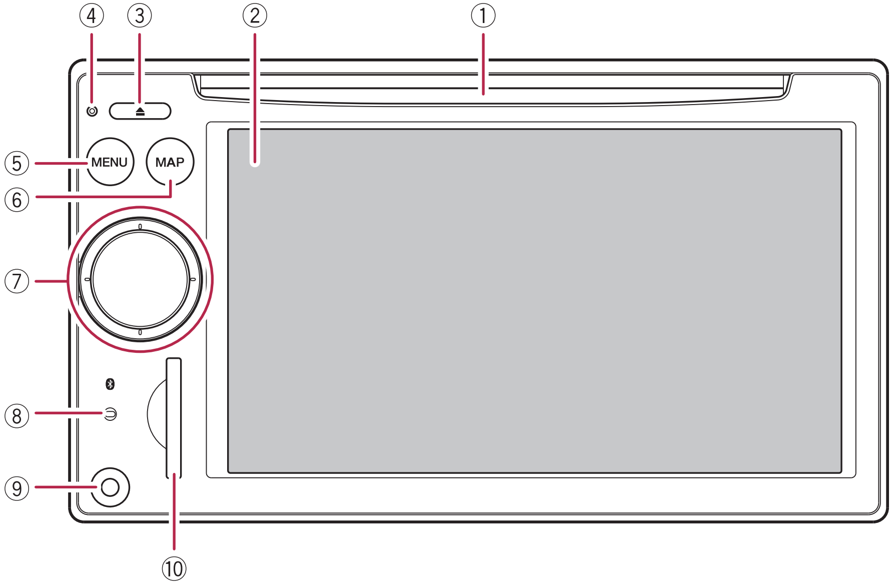
- If there appear to be problems with the operation of the system.
- When changing the combination of the equipment.
- When adding/removing additional products that connect to the navigation system.
- If your vehicle position shown on the map with a significant positioning error.

### 1 Turn the ignition switch OFF.

### 2 Press RESET button with a pen tip or other pointed instrument.



❒ If you have connected other equipment to this navigation system with IP-BUS, be sure to reset that equipment too. ■



## Checking part names and functions

This chapter gives information about the names of the parts and the main features using the buttons.

① **Disc loading slot**

Insert a disc to play.

- ➲ For details concerning operations, refer to *Inserting/ejecting a disc* on the next page.

② **LCD screen**

③ **EJECT button**

④ **RESET button**

- ➲ For details concerning operations, refer to *Resetting the microprocessor* on page 10.

⑤ **MENU button**

Press **MENU** button to display the "**Top Menu**".

Press and hold to display the "**Screen Calibration**" screen.

- ➲ For details concerning operations, refer to *Adjusting the response positions of the touch panels (touch panel calibration)* on page 122.

⑥ **MAP button**

Press to view the map screen.

Press and hold to display the "**Picture Adjustment**" screen.

- ➲ For details concerning operations, refer to *Adjusting the screen brightness* on page 123.

⑦ **MULTI-CONTROL**

**Rotating**;

Adjusts the AV (Audio and Video) source volume.

**Moving upward or downward once**;

Changes the map scale one step at a time.

**Keep moving upward or downward**;
Changes the map scale continuously.
- ❐ This operation is available only while the map screen is displayed.

**Moving MULTI-CONTROL to the left or right**;
Allows you to change the frequency one step at a time; operates track search controls.

**Keep moving MULTI-CONTROL to the left or right**;
Allows you to perform manual seek tuning, fast forward or reverse.

**Pressing the centre of MULTI-CONTROL**;
Allows you to hear the previous route guidance.
- ❐ When your phone is paired to the navigation system, pressing its centre allows you to answer an incoming call or end the phone call.

**Keep pressing the centre of MULTI-CONTROL**;
Mutes the AV (Audio and Video) source. To cancel the muting, press and hold it again.

⑧ **Bluetooth connection status indicator**
Lights up when your phone is paired to the navigation system by Bluetooth wireless technology.

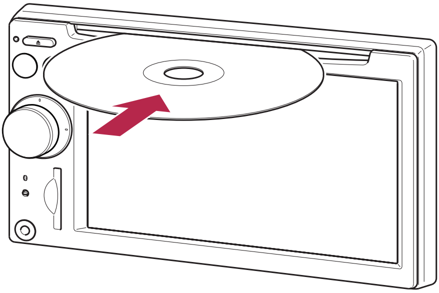
⑨ **"AV2" input jack**
This is the "**AV2**" input terminal. Use the CD-RM10 (sold separately) to connect the external video component.
- ❐ To connect your iPod by using USB interface cable for iPod (CD-IU230V), use "**AV1**" input (RCA) on the backside.

⑩ **SD card slot**
- ➲ For more detailed information, refer to *Inserting and ejecting an SD memory card* on this page. ■

# Inserting/ejecting a disc

## Inserting a disc

- ● **Insert a disc into the disc loading slot.**



- ❐ The built-in drive plays one standard 12-cm or 8-cm (single) disc at a time. Do not use an adapter when playing 8-cm discs.
- ❐ Do not insert anything other than a disc into the disc loading slot.

## Ejecting a disc

- ● **Press EJECT button.**

The disc is ejected. ■

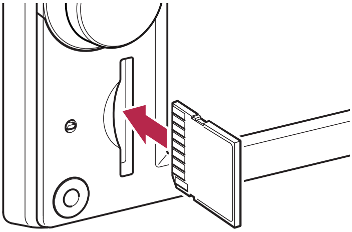
# Inserting and ejecting an SD memory card

⚠ **CAUTION**
- Keep the dummy SD card out of the reach of small children to prevent them from accidentally swallowing it.
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

## Inserting an SD memory card

- **Insert an SD memory card into the SD card slot.**

Insert it with the contact surface facing to the left and press the card until it clicks and completely locks.

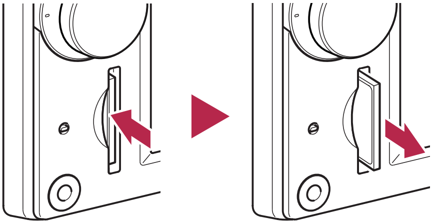


- ❐ There is no compatibility for Multi Media Card (MMC).
- ❐ Compatibility with all SD memory card is not guaranteed.
- ❐ Optimum performance of this unit may not be obtained depending on the SD memory card.
- ❐ Do not insert anything other than SD memory cards or dummy SD cards into the SD card slot.

## Ejecting an SD memory card

1 **Press the SD memory card until it clicks.**

The SD memory card is ejected.



2 **Pull out the SD memory card.**

- ❐ Insert the dummy SD card to keep the SD card slot free of dust when the SD memory card is not inserted. ■

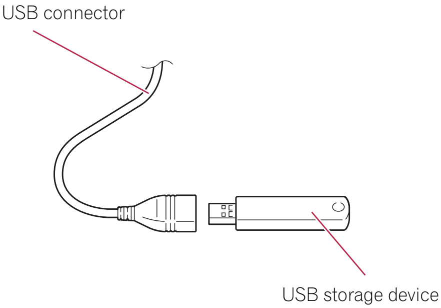
# Plugging and unplugging a USB storage device

**CAUTION**

- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

## Plugging in a USB storage device

- **Plug a USB storage device into the USB connector.**



- ❐ Compatibility with all USB storage device is not guaranteed.
  Optimum performance of this navigation system may not be obtained depending on the USB storage device that is connected.
- ❐ Connection via USB hub is not available.

## Unplugging a USB storage device

- **Pull out the USB storage device after checking that no data is being accessed.** ■

## Connecting and disconnecting iPod

**⚠ CAUTION**

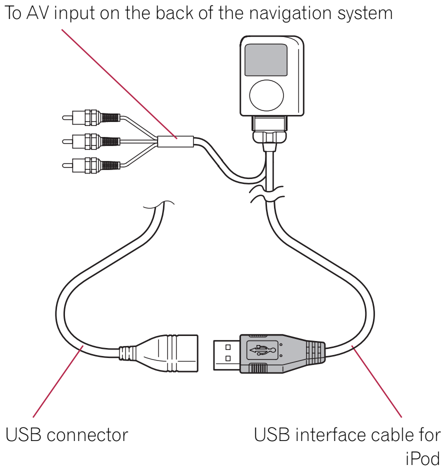
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

### Connecting your iPod

Using the USB interface cable for iPod enables you to connect your iPod to the navigation system.

❐ For connection, USB interface cable for iPod (CD-IU230V) (sold separately) is required.

**1 Pull out the USB storage device after checking that no data is being accessed.**


To AV input on the back of the navigation system
USB connector
USB interface cable for iPod

❐ For more details about iPod compatibility with this navigation system, refer to the information on our website.

❐ Connection via USB hub is not available.

**2 Connect your iPod.**

### Disconnecting your iPod

- **Pull out the USB interface cable for iPod after checking that no data is being accessed.** ■

## Flow from startup to termination

**1 Start the engine to boot up the system.**

After a short pause, the navigation splash screen comes on for a few seconds.

❐ To protect the LCD screen from damage, be sure to use your fingers to touch the touch panel keys. (The stylus is supplied for special calibrations. Do not use the stylus for normal operations.)

**2 Turn off the vehicle engine to terminate the system.**

The navigation system is also turned off. ■

## On first-time startup

**⚠ CAUTION**

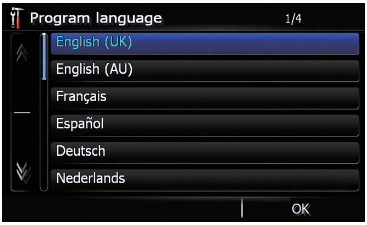
The rear view camera function is not available for safety reasons until the navigation system boots up completely.

When you use the navigation system for the first time, select the language that you want to use.

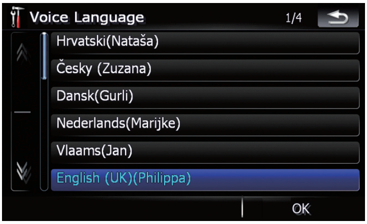
**1 Start the engine to boot up the system.**

After a short pause, the navigation splash screen comes on for a few seconds.

### 2 Touch the language that you want to use on the screen.

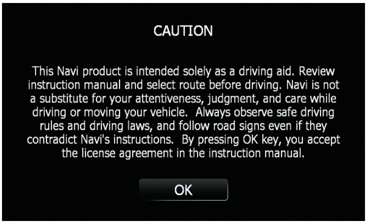

Program language
1/4
English (UK)
English (AU)
Français
Español
Deutsch
Nederlands
OK

### 3 Touch the language that you want to use for the voice guidance.


Voice Language
1/4
Hrvatski(Nataša)
Česky (Zuzana)
Dansk(Gurli)
Nederlands(Marijke)
Vlaams(Jan)
English (UK)(Philippa)
OK

The navigation system will now restart.

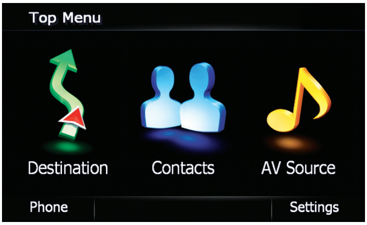
### 4 Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions.



CAUTION

This Navi product is intended solely as a driving aid. Review instruction manual and select route before driving. Navi is not a substitute for your attentiveness, judgment, and care while driving or moving your vehicle. Always observe safe driving rules and driving laws, and follow road signs even if they contradict Navi's instructions. By pressing OK key, you accept the license agreement in the instruction manual.

OK


Top Menu
Destination
Contacts
AV Source
Phone
Settings

The “**Top Menu**” appears. ■

## Regular startup

### ⚠ CAUTION

The rear view camera function is not available for safety reasons until the navigation system boots up completely.

- **Start the engine to boot up the system.**

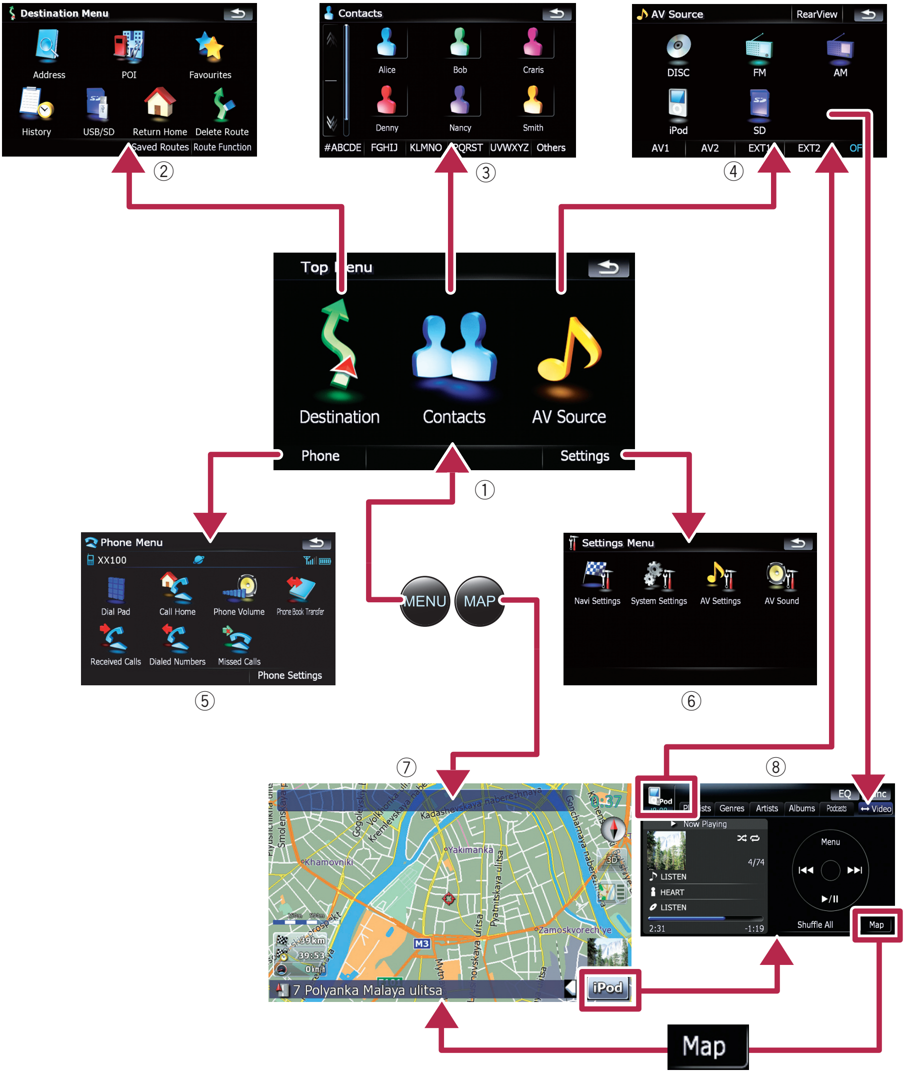
After a short pause, the navigation splash screen comes on for a few seconds.

- ❒ The screen shown will differ depending on the previous conditions.
- ❒ If the navigation screen was shown previously, the disclaimer appears.
  Read the disclaimer carefully, checking its details, and then touch [**OK**] if you agree to the conditions.
- ❒ If other screens were shown previously, the disclaimer screen will be skipped.
- ❒ If the anti-theft function is activated, you must enter your password. After unlocking the navigation system, the “**Top Menu**” appears. If you enter the navigation screen first, the disclaimer screen will appear.
  Read the disclaimer carefully, checking its details, and then touch [**OK**] if you agree to the conditions. ■

## How to use the navigation menu screens

The "**Top Menu**" appears when you boot up the navigation system for the first time.

### Screen switching overview


Destination Menu
Address
POI
Favourites
History
USB/SD
Return Home
Delete Route
Saved Routes
Route Function
②
Contacts
Alice
Bob
Craris
Denny
Nancy
Smith
#ABCDE
FGHIJ
KLMNO
PQRST
UVWXYZ
Others
③
AV Source
RearView
DISC
FM
AM
iPod
SD
AV1
AV2
EXT1
EXT2
OFF
④
Top Menu
Destination
Contacts
AV Source
Phone
Settings
①
MENU
MAP
Phone Menu
XX100
Dial Pad
Call Home
Phone Volume
Phone Book Transfer
Received Calls
Dialed Numbers
Missed Calls
Phone Settings
⑤
Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound
⑥
⑦
Kadashevskaya naberezhnaya
Yakimanka
Khamovniki
Zamoskvorech'ye
M3
7 Polyanka Malaya ulitsa
iPod
⑧
iPod
Playlists
Genres
Artists
Albums
Podcasts
EQ
Video
Now Playing
4/74
LISTEN
HEART
LISTEN
2:31
-1:19
Menu
Shuffle All
Map
Map

## What you can do on each menu

① **Top Menu**
Press **MENU** button to display the “**Top Menu**”.
This is the starting menu to access the desired screens and operate the various functions.

② **Destination Menu**
You can search for your destination on this menu. You can also check or cancel your set route from this menu.

③ **Contacts** screen
You can access the list of contacts to call up an entry.

④ **AV Source** menu
You can access the screen for selecting the audio and visual source to play.

⑤ **Phone Menu**
You can access the screen that is related to hands-free phoning to see call histories and change the settings on the Bluetooth wireless technology connection.

⑥ **Settings Menu**
You can access the screen to customise settings.

⑦ **Map screen**
Press **MAP** button to display the navigation map screen.

⑧ **AV operation screen**
When you play the AV source, this screen appears regularly. Touching the icon on the top left corner displays the “**AV Source**” menu.

❒ To return to the previous screen, touch ↩.

## Displaying the rear camera image

[**RearView**] can be displayed the full-screen rear camera image. [**RearView**] is useful if you want to monitor an attached trailer, etc.

➲ For details, refer to *Setting the rear view camera* on page 121.

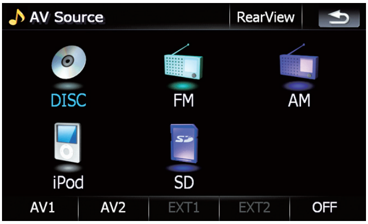
**1 Press MENU button to display the “Top Menu”, and then touch [Settings].**

**2 Touch [System Settings] and then touch [Back Camera].**

**3 Touch [On] next to “Camera” to activate the camera setting.**

**4 Press MENU button to display the “Top Menu” and then touch [AV Source].**

**5 Touch [RearView] on the “AV Source” menu.**



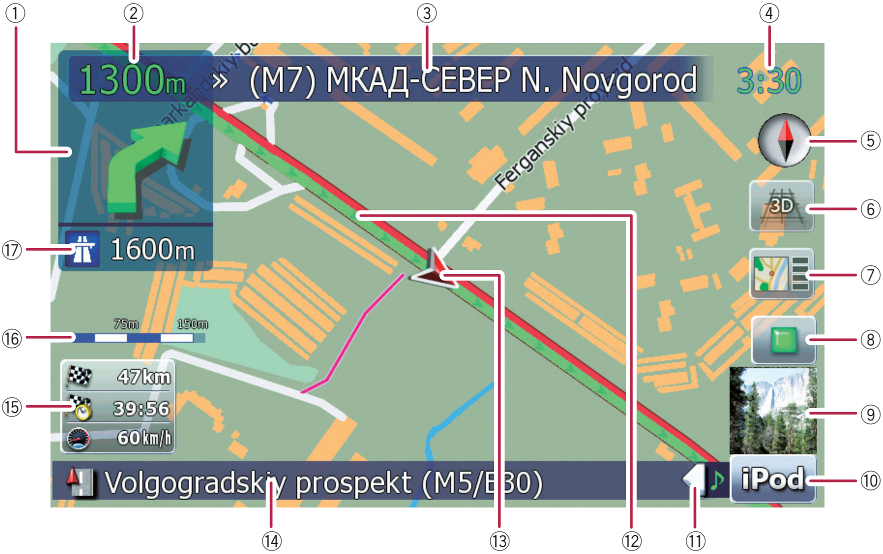
■

# How to use the map

Most of the information provided by your navigation system can be seen on the map. You need to become familiar with how the information appears on the map.

## How to read the map screen

This example shows an example of a 2D map screen.


①
②
③
④
1300m
» (M7) МКАД-СЕВЕР N. Novgorod
3:30
Ferganskiy proyezd
⑤
3D
⑥
⑦
⑧
⑨
⑰
1600m
⑯
75m
150m
⑮
47km
39:56
60km/h
Volgogradskiy prospekt (M5/E30)
iPod
⑩
⑭
⑬
⑫
⑪

- ❒ Information with the mark (*) appears only when the route is set.
- ❒ Depending on the conditions and settings, some items may not be displayed.

① **Next direction of travel***

When you approach a guidance point, this appears green. Touching this item enables you to hear the previous guidance again.

- ❒ For more information about the direction symbol, refer to *Supplemental information about directions* on page 146.

② **Distance to the guidance point***

Shows the distance to the next guidance point.

③ **Name of the street to be used (or next guidance point)***

④ **Current time**

⑤ **Compass**

The red arrow indicates north.

⑥ **Map mode selector**

- ➲ For details, refer to *Switching the map between 2D and 3D* on page 22.

⑦ **Shortcut to the “Map Confirmation Screen”**

Touching this shortcut enables the screen to switch to the “Map Confirmation Screen” directly with the current position or the cursor position centred.

- ➲ For details, refer to *What you can do with the “Map Confirmation Screen”* on page 36.

⑧ **Stop key for the dummy run**

This key will be displayed while you activate the dummy run ("**Fly over**" or "**Demo Mode**"). Touching the key to cancel the dummy run.

➲ For details, refer to **Demo Mode** on page 115.

➲ For details, refer to *Playing simulated travel at high speed* on page 43.

⑨ **Album artwork on iPod**

If you connect your iPod to this navigation system, the album artwork that is playing appears.

⑩ **Shortcut to the AV operation screen**

The **AV Source** currently selected is shown. Touching the indicator displays the AV operation screen of the current source directly.

⑪ **Extension tab for the AV information bar**

Touching this tab opens the AV information bar and enables you to briefly view the current status on the AV source. Touching it again retracts the bar.

⑫ **Current route***

The route currently set is highlighted in bright colour on the map. If a waypoint is set on the route, the route after the next waypoint is highlighted in other colour.

⑬ **Current position**

Indicates the current location of your vehicle. The apex of the triangular mark indicates your orientation and the display moves automatically as you drive.

❐ The apex of the triangular mark is the proper current position.

⑭ **Street name (or city name) that your vehicle is travelling along**

⑮ **Multi-Info window**

Shows the value on the items selected on "**Displayed Info**". Touching this area allows you to display the "**Route Information**" screen.

➲ For details, refer to **Displayed Info** on page 111.

➲ For details, refer to *Checking the current route conditions* on page 42.

❐ This item is not shown when "**Full Screen Cockpit**" is set to "**On**".

➲ For details, refer to **Map Settings** on page 110.

❐ The estimated time of arrival is an ideal value that the navigation system computes internally as the route is calculated. The estimated time of arrival should be read just as a reference value, and does not guarantee arrival at the time indicated.

⑯ **Map scale**

The scale of the map is indicated by distance.

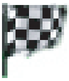
⑰ **Second Manoeuvre Arrow***

Shows the turning direction after next and the distance to there.

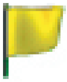
❐ This item is not shown when "**Full Screen Cockpit**" is set to "**On**".

➲ For details, refer to **Map Settings** on page 110.

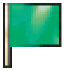
## Meaning of guidance flags



**: Destination**
The chequered flag indicates your destination.



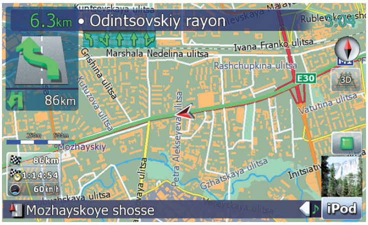
**: Waypoint**
The yellow flags indicate your waypoints.



**: Start point**
The bright green flag indicates your start point.

## When you drive on a multi-lane road

Appears where multi-lane roads exist when you are driving on your route. The highlighted lane indicates the recommended lane.



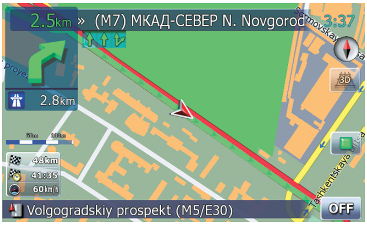
❒ This information is based on the map database. Thus, the information may be different from what actual condition exists. Use it as just a directional reference for your driving.

### Note regarding the route highlighted in purple

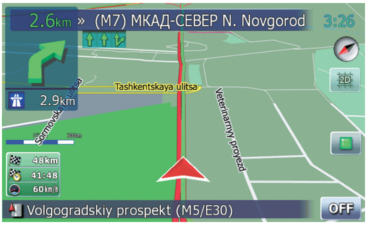
❒ A route highlighted in purple on the map indicates that your route includes a road not matching your preference on the following settings in “**Route**”; “**Unpaved Roads**”, “**Motorways**”, “**Ferries**”, “**U-turns**”, “**Permit Needed**”, “**Toll Roads**”. For your safety, please review and obey all local traffic rules along the highlighted route.

## Switching the map between 2D and 3D

**2D map screen**


2.5km » (M7) МКАД-СЕВЕР N. Novgorod 3:37
2.8km
3D
48km
41:35
60km/h
Volgogradskiy prospekt (M5/E30)
OFF

**3D map screen**


2.6km » (M7) МКАД-СЕВЕР N. Novgorod 3:26
2.9km
2D
Tashkentskaya ulitsa
Veterinarnyy proyezd
48km
41:48
60km/h
Volgogradskiy prospekt (M5/E30)
OFF

**1 Press MAP button to display the navigation map screen.**

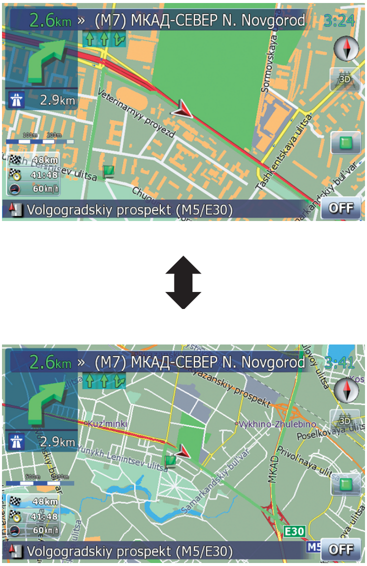
**2 Touch 2D or 3D to switch the map mode.**

## Changing the scale of the map

**1 Press MAP button to display the navigation map screen.**

**2 Move MULTI-CONTROL down or up to zoom in or out.**

Moving **MULTI-CONTROL** upward or downward once allows you to change the map scale one step at a time. Holding **MULTI-CONTROL** while moving it up or down allows you to change the scale sequentially.


2.6km » (M7) МКАД-СЕВЕР N. Novgorod 3:24
2.9km
3D
48km
41:48
60km/h
Volgogradskiy prospekt (M5/E30)
OFF
2.6km » (M7) МКАД-СЕВЕР N. Novgorod 3:41
2.9km
3D
48km
41:48
60km/h
Volgogradskiy prospekt (M5/E30)
OFF

❒ Zooming out will reduce the size of the icon and further zooming out will hide it. However, the pin-shaped icon is not resized and keeps displayed.

❒ Further zooming out hides the lines of traffic information.

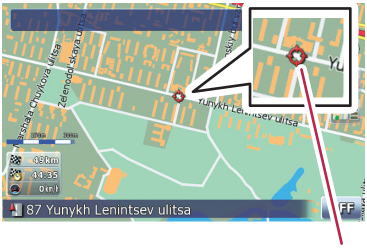
## Scrolling the map to the position you want to see

**1 Press MAP button to display the navigation map screen.**

### 2 Touch 2D to switch the 2D map mode.

### 3 Touch the map briefly.

Briefly touching the position on the map that you want to see positions the cursor there.


Zelenodol'skaya ulitsa
Chuykova ulitsa
Yunykh Lenintsev ulitsa
49km
44:35
0km/h
87 Yunykh Lenintsev ulitsa
OFF

Cursor

Positioning the cursor to the desired location results in a brief informational overview about the location being displayed at the bottom of screen, with street name and other information for this location being shown. (The information shown varies depending on the position.)

### 4 Touch and drag the map in the desired direction to scroll.

Dragging the map scrolls it. The scrolling increment depends on your dragging length.

- ❐ Pressing **MAP** button returns the map to the current position.

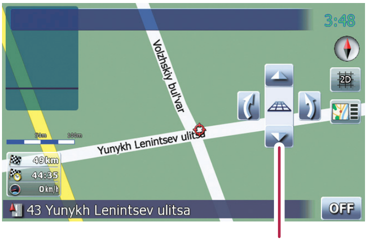
## Changing the tilt and rotation angle of the map

On the 3D map screen, briefly touching the map shows the tilt controls and rotation angle.

### 1 Press MAP button to display the navigation map screen.

### 2 Touch 3D to switch the 3D map mode.

### 3 Touch anywhere on the map briefly to show the tilt controls and rotation angle.


3:48
2D
Volzhskiy bul'var
Yunykh Lenintsev ulitsa
49km
44:35
0km/h
43 Yunykh Lenintsev ulitsa
OFF

Controls for tilt and rotation angle

### 4 Touch the controls to adjust the tilt and rotation angle. ■

## The basic flow of creating your route

1 Park your vehicle in a safe place, and apply the handbrake.

⬇

2 Display the "**Destination Menu**".

⬇

3 Select the method of searching for your destination.

⬇

4 Enter the information for the destination and narrow down candidates to one.

⬇

5 Touch [**Go Here Now**] on the "Map Confirmation Screen".

⬇

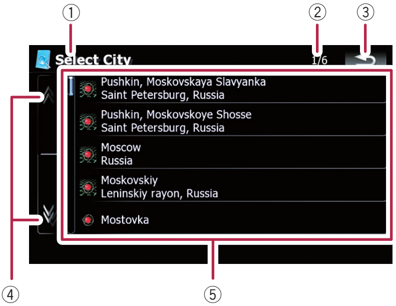
6 The navigation system calculates the route to your destination, and then shows the route on the map.

⬇

7 After releasing the handbrake, drive in accordance with navigation guidance.

■

## The operations of a list screen (e.g. city list)


①
②
③
Select City
1/6
Pushkin, Moskovskaya Slavyanka
Saint Petersburg, Russia
Pushkin, Moskovskoye Shosse
Saint Petersburg, Russia
Moscow
Russia
Moskovskiy
Leninskiy rayon, Russia
Mostovka
④
⑤

① **Screen title**
This description will provide you with a reference for the next operation.

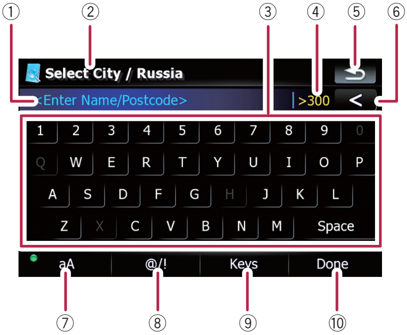
② **Current page/total pages**

③ ↩:
Returns the previous screen.

④ ⋀⋁:
Touching ⋀ or ⋁ on the scroll bar scrolls through the list and allows you to view the remaining items.

⑤ **Listed items**:
Touching an item on the list allows you to narrow down the options and proceed to the next operation. ■

## The operation of the on-screen keyboard


①
②
③
④
⑤
⑥
Select City / Russia
<Enter Name/Postcode>
>300
<
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M Space
aA
@/!
Keys
Done
⑦
⑧
⑨
⑩

① **Text box:**
Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.

② **Screen title**
This description will provide you with a reference for the next operation.

③ **Keyboard:**
Touching the keys enables you to enter the characters.

④ **Number of possible choices**

⑤ ↩:
Returns the previous screen.

⑥ <:
Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the button deletes all of the text.

⑦ **Caps lock control**
Switches the keyboard between lowercase letters and uppercase letters.
Each touch of [**aA**] changes the settings as follows:
● aA — enables you to capitalise the first letter of a word.
aA — enables you to enter letters in lower-case. (When a space is entered, it switches ● aA automatically.)
●● aA — enables you to enter letters with capitals (caps) lock.

⑧ [**@/!**]:
Displays the key to enter special characters, such as [**!**].

❒ The appearance of this key and typeable characters change according to the current keyboard layout.

⑨ [**Keys**]:
Switches the on-screen keyboard layout.

⑩ [**Done**]:
Confirms the entry and allows you to proceeds to the next step. ■

**⚠ CAUTION**

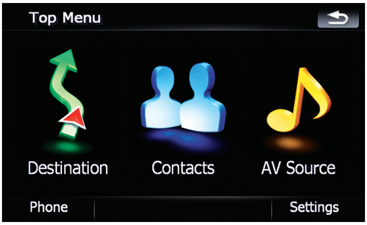
For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the handbrake before setting your route.

❐ Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

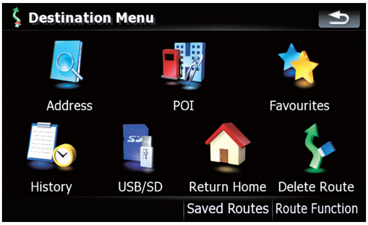
## Searching for a location by address

The most frequently used function is [**Address**], in which the address is specified and the destination is searched.

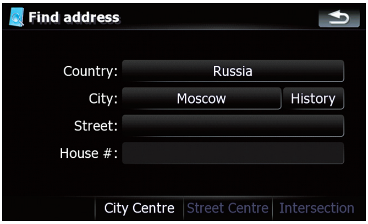
### 1 Touch [Destination] on the "Top Menu".


Top Menu
Destination
Contacts
AV Source
Phone
Settings

### 2 Touch [Address].

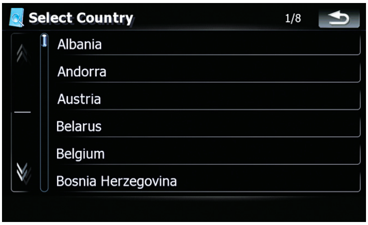

Destination Menu
Address
POI
Favourites
History
USB/SD
Return Home
Delete Route
Saved Routes
Route Function

### 3 Touch the key next to "Country:" to display the country list.


Find address
History
City Centre
Street Centre
Intersection

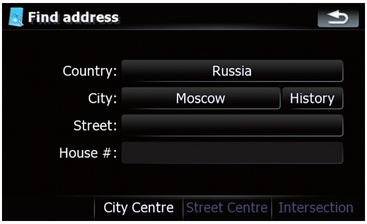
Country: Russia
City: Moscow
Street:
House #:

### 4 Touch one of the items on the list to set the country as search area.


Select Country
1/8
Albania
Andorra
Austria
Belarus
Belgium
Bosnia Herzegovina

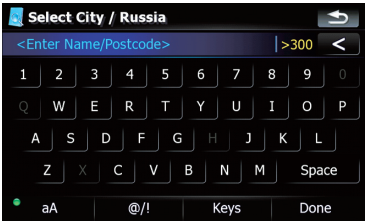
The screen returns to the previous screen.

### 5 Touch the key next to "City:" to enter the city name.


Find address
City Centre
Street Centre
Intersection
History

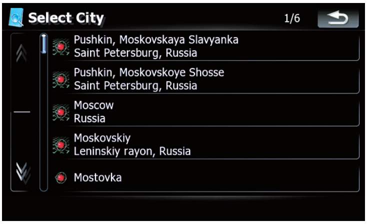
Country: Russia
City: Moscow
Street:
House #:

### 6 Enter the city name or postcode.


Select City / Russia
<Enter Name/Postcode>
>300
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M Space
aA
@/!
Keys
Done

- When the options are narrowed down to six or less, those are automatically listed.
- If you want to list the options matching to the current information entered, touch [**Done**].
- Touching [**History**] displays the list of cities that you selected before.

### 7 Touch the desired city name.


Select City
1/6

Pushkin, Moskovskaya Slavyanka
Saint Petersburg, Russia
Pushkin, Moskovskoye Shosse
Saint Petersburg, Russia
Moscow
Russia
Moskovskiy
Leninskiy rayon, Russia
Mostovka

- When a city is already set, touching [**City Centre**] allows you to select the representative location of the city and proceed to the "Map Confirmation Screen".

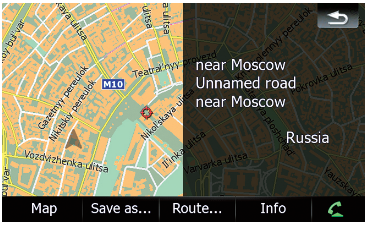
### 8 Enter the street name and touch the desired one from the list.

- When a street is already set, touching [**Street Centre**] allows you to select the representative point of the street and proceed to the "Map Confirmation Screen".
- When a street is already set, touching [**Intersection**] allows you to search for an intersection. After entering the second street name and selecting the desired intersection, the "Map Confirmation Screen" appears. This is useful when you don't know the house number or cannot input the house number of the selected street.

### 9 Enter the house number and then touch [Done].

- If the house number you have entered is not found, a message appears. In that case, touch [**OK**] and try entering the existing house number.

### 10 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.


Teatral'nyy proezd
M10
Gazetnyy pereulok
Nikitskiy pereulok
Nikol'skaya ulitsa
Vozdvizhenka ulitsa
Il'inka ulitsa
Varvarka ulitsa
Map
Save as...
Route...
Info

near Moscow
Unnamed road
near Moscow
Russia

Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➲ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36.

If only one option is appropriate for your entry, the screen will jump to the "Map Confirmation Screen" directly and the process of entering the street name or house number will be skipped. If this is an undesirable location, touch ⮌ to retry with another address. ■

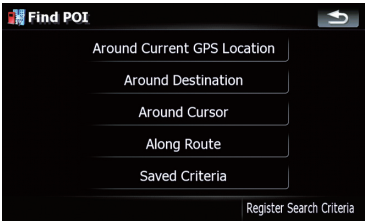
## Searching for the vicinity Points of Interest (POI)

Information about various facilities (Points Of Interest - POI), such as petrol stations, parkings or restaurants, is available. By selecting the category (or entering the POI Name), you can search for a POI.

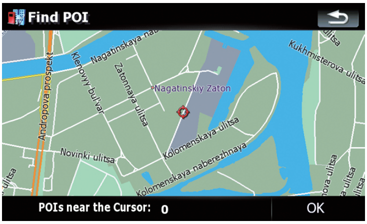
### Searching for POIs around the cursor

**1 Touch [Destination] on the "Top Menu", and then touch [POI].**

**2 Touch [Around Cursor].**

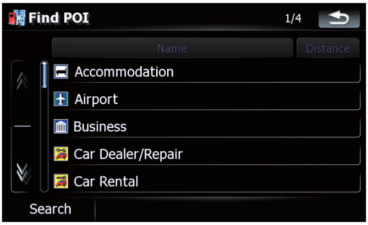

Find POI
Around Current GPS Location
Around Destination
Around Cursor
Along Route
Saved Criteria
Register Search Criteria

**3 Drag the map to move the cursor to the desired position and touch [OK].**


Find POI
Nagatinskaya nab
Klenovyy bul'var
Zatonnaya ulitsa
Nagatinskiy Zaton
Kukhmisterova ulitsa
Andropova prospekt
Novinki ulitsa
Kolomenskaya ulitsa
Kolomenskaya naberezhnaya
POIs near the Cursor: 0
OK

The number of nearby POIs will appear at the bottom of the screen.

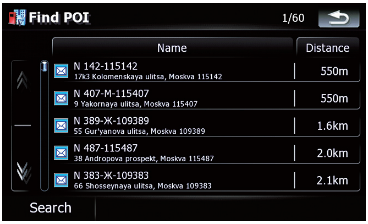
**4 Touch your desired category.**


Find POI
1/4
Name
Distance
Accommodation
Airport
Business
Car Dealer/Repair
Car Rental
Search

If there are more detailed categories within the selected category, repeat this step as many times as necessary.

Touch [**Search**] to search for a POI by entering the POI name in the selected category.

**5 Touch your desired POI.**

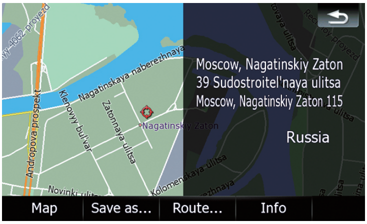

Find POI
1/60
Search

| Name | Distance |
|---|---|
| N 142-115142<br>17k3 Kolomenskaya ulitsa, Moskva 115142 | 550m |
| N 407-M-115407<br>9 Yakornaya ulitsa, Moskva 115407 | 550m |
| N 389-Ж-109389<br>55 Gur'yanova ulitsa, Moskva 109389 | 1.6km |
| N 487-115487<br>38 Andropova prospekt, Moskva 115487 | 2.0km |
| N 383-Ж-109383<br>66 Shosseynaya ulitsa, Moskva 109383 | 2.1km |

- Touching [**Name**] tab sorts the options in the list in alphabetical order.
- Touching [**Distance**] tab sorts the options in the list in order by distance.

❐ Icons are helpful for quickly telling the category of facilities with the same name.

### 6 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.


Nagatinskaya naberezhnaya
Andropova prospekt
Klenovyy bulvar
Zatonnaya ulitsa
Nagatinskiy Zaton
Kolomenskaya ulitsa
Novinki ulitsa
Map
Save as...
Route...
Info

Moscow, Nagatinskiy Zaton
39 Sudostroitel'naya ulitsa
Moscow, Nagatinskiy Zaton 115
Russia

Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➲ For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.
- ❒ Searching for a spot and touching [**Info**] on the “Map Confirmation Screen” also allows you to search for the nearby POIs around the cursor.
- ➲ For details, refer to *Viewing the information of a specified location* on page 38.

## Searching for a nearby POI

### 1 Touch [Destination] on the “Top Menu”, and then touch [POI].

### 2 Touch [Around Current GPS Location].

The list of POI categories appears.

- ➲ For the subsequent operations, refer to *Searching for POIs around the cursor* on the previous page.

## Searching for POIs along the current route

❒ This function is available when the route is set.

### 1 Touch [Destination] on the “Top Menu”, and then touch [POI].

### 2 Touch [Along Route].

The list of POI categories appears.

- ➲ For the subsequent operations, refer to *Searching for POIs around the cursor* on the previous page.

## Searching for POIs around the destination

❒ This function is available when the route is set.

### 1 Touch [Destination] on the “Top Menu”, and then touch [POI].

### 2 Touch [Around Destination].

The list of POI categories appears.

- ➲ For the subsequent operations, refer to *Searching for POIs around the cursor* on the previous page.

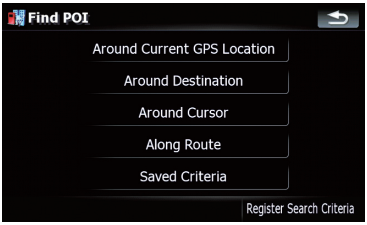
## Using “Saved Criteria”

### Memorising your selection sequence

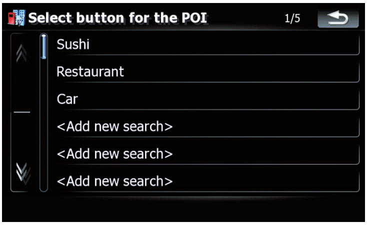
You can store the selected search method and one of the categories as the shortcut to recall it later. It allows you to search for a POI in the same way as you did before. You can also delete the shortcuts.

### 1 Touch [Destination] on the “Top Menu”, and then touch [POI].

### 2 Touch [Register Search Criteria].

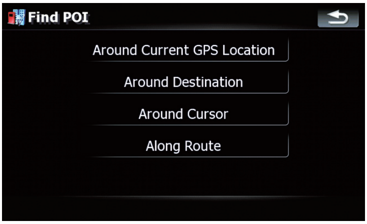

Find POI
Around Current GPS Location
Around Destination
Around Cursor
Along Route
Saved Criteria
Register Search Criteria

## 3 Touch one of the items on the list.


Select button for the POI
1/5
Sushi
Restaurant
Car
<Add new search>
<Add new search>
<Add new search>

- Selecting an item that has already been stored allows you to overwrite it.

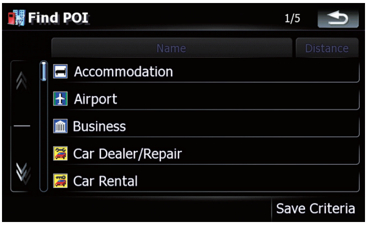
## 4 Touch the search method that you want to put it into memory.


Find POI
Around Current GPS Location
Around Destination
Around Cursor
Along Route

The list of POI categories appears.

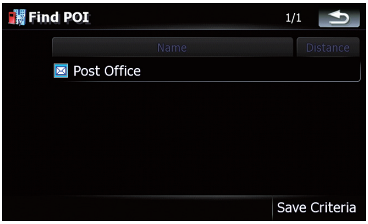
## 5 Touch the category that you want to put it into memory.

If there are more detailed categories within the selected category, select the desired category from the list repeatedly until your desired category appears.


Find POI
1/5
Name
Distance
Accommodation
Airport
Business
Car Dealer/Repair
Car Rental
Save Criteria

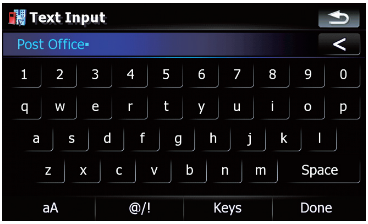
Your selection sequence is shown on the top of the screen.

## 6 Recheck the sequence and touch [Save Criteria] to put it into memory.


Find POI
1/1
Name
Distance
Post Office
Save Criteria

- Touching [**Save Criteria**] without selecting a category allows you to store only your selected search method including all categories.
- If there aren't anymore detailed categories, a blank list appears. In such case, touching [**Save Criteria**] allows you to store it as the currently selected category. To know the states of the current sequence, refer to the top of the screen.

## 7 Enter the desired name and then touch [Done] to complete the entry.


Post Office
Text Input
<
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
a s d f g h j k l
z x c v b n m Space
aA
@/!
Keys
Done

The storing process has completed and the shortcut is available on "**Saved Criteria**".

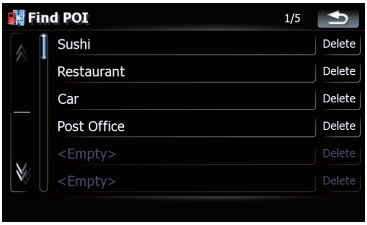
## Searching for POIs by using the memorised sequence

You can search for POIs with using the prestored shortcut.

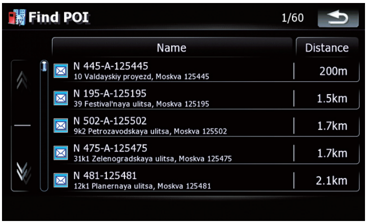
## 1 Touch [Destination] on the "Top Menu", and then touch [POI].

## 2 Touch [Saved Criteria].

### 3 Touch one of the items on the list.

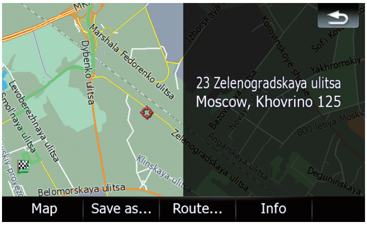

Find POI
1/5
Sushi
Delete
Restaurant
Delete
Car
Delete
Post Office
Delete
<Empty>
Delete
<Empty>
Delete

### 4 Touch the desired POI.


Find POI
1/60

| Name | Distance |
|---|---|
| N 445-A-125445<br>10 Valdayskiy proyezd, Moskva 125445 | 200m |
| N 195-A-125195<br>39 Festival'naya ulitsa, Moskva 125195 | 1.5km |
| N 502-A-125502<br>9k2 Petrozavodskaya ulitsa, Moskva 125502 | 1.7km |
| N 475-A-125475<br>31k1 Zelenogradskaya ulitsa, Moskva 125475 | 1.7km |
| N 481-125481<br>12k1 Planernaya ulitsa, Moskva 125481 | 2.1km |

### 5 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.


23 Zelenogradskaya ulitsa
Moscow, Khovrino 125

Marshala Fedorenko ulitsa
Dybenko ulitsa
Levoberezhnaya ulitsa
Belomorskaya ulitsa
Klinskaya ulitsa
Zelenogradskaya ulitsa
Yakhromskiy
Deguninskaya
Map
Save as...
Route...
Info

Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

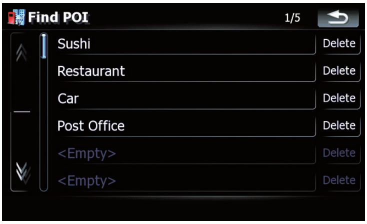
- ➲ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36.

### Deleting the memorised POI shortcuts

### 1 Touch [Destination] on the "Top Menu", and then touch [POI].

### 2 Touch [Saved Criteria].

### 3 Touch [Delete] on the right of the item that you want to delete.


Find POI
1/5
Sushi
Delete
Restaurant
Delete
Car
Delete
Post Office
Delete
<Empty>
Delete
<Empty>
Delete

■

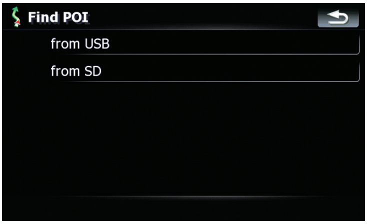
## Searching for POIs by using the data on external storage devices (USB, SD)

Creating a customised POI is possible by using the utility programme "NavGate FEEDS" which is available separately, on your PC. ("NavGate FEEDS" will be available on our website.) Storing the customised POI properly and connecting the external storage device (USB, SD) enables the system to use the data for searches.

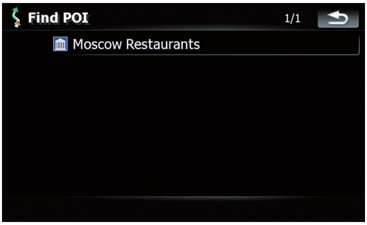
### 1 Connect the USB device or insert the SD card.

### 2 Touch [Destination] on the "Top Menu", and then touch [USB/SD].

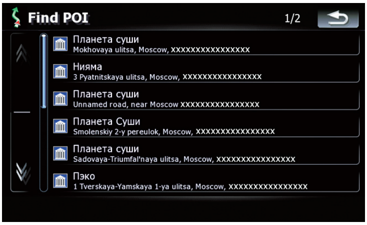
### 3 Touch the desired storage that you want to load.


Find POI
from USB
from SD

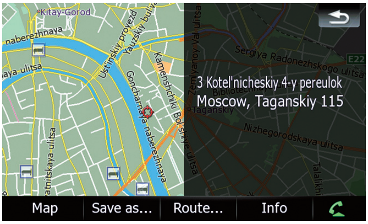
### 4 Touch the folder that includes the desired item on the list.


Find POI
1/1
Moscow Restaurants

### 5 Touch one of the items on the list.


Find POI
1/2
Планета суши
Mokhovaya ulitsa, Moscow, XXXXXXXXXXXXXXXX
Нияма
3 Pyatnitskaya ulitsa, Moscow, XXXXXXXXXXXXXXXX
Планета суши
Unnamed road, near Moscow XXXXXXXXXXXXXXXX
Планета Суши
Smolenskiy 2-y pereulok, Moscow, XXXXXXXXXXXXXXXX
Планета суши
Sadovaya-Triumfal'naya ulitsa, Moscow, XXXXXXXXXXXXXXXX
Пэко
1 Tverskaya-Yamskaya 1-ya ulitsa, Moscow, XXXXXXXXXXXXXXXX

### 6 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.


3 Kotel'nicheskiy 4-y pereulok
Moscow, Taganskiy 115
Map
Save as...
Route...
Info

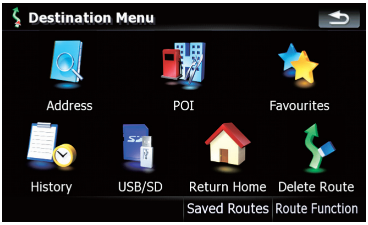
Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➲ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36. ■

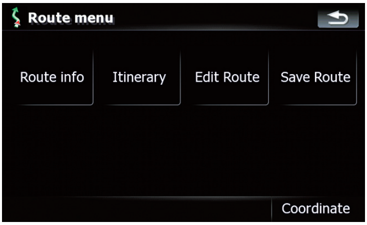
## Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

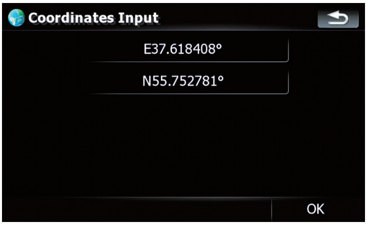
### 1 Touch [Destination] on the "Top Menu", and then touch [Route Function].


Destination Menu
Address
POI
Favourites
History
USB/SD
Return Home
Delete Route
Saved Routes
Route Function

**2 Touch [Coordinate].**


Route menu
Route info
Itinerary
Edit Route
Save Route
Coordinate

**3 Touch either the latitude key or the longitude key, whichever you want to enter.**

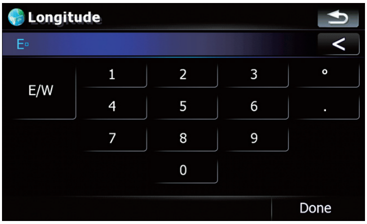

Coordinates Input
OK

E37.618408°

N55.752781°

The values on the latitude key or longitude key shows the coordinates on the cursor just before entering this screen.

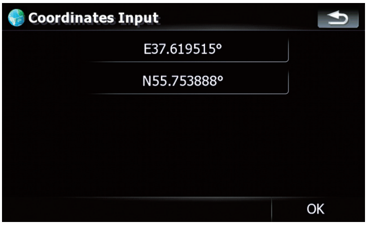
**4 Touch < to delete the current value and enter the desired coordinate.**


Longitude
E
<
E/W
1
2
3
°
4
5
6
.
7
8
9
0
Done

- Touching [**N/S**] or [**E/W**] changes the hemisphere.

**5 Touch [Done].**
The screen returns to the previous screen. Touch the other key that you have not entered yet, enter the latitude or longitude and then touch [**Done**] to finish the entry.

**6 Touch [OK].**

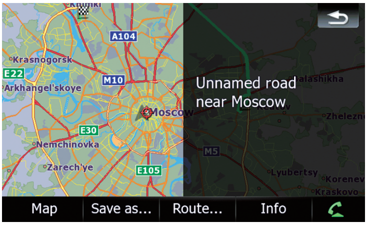

Coordinates Input
OK

E37.619515°

N55.753888°

The "Map Confirmation Screen" appears.

**7 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.**


Khimki
A104
Krasnogorsk
E22
Arkhangel'skoye
M10
Moscow
E30
Nemchinovka
Zarech'ye
E105
M5
Balashikha
Zheleznodorozhny
Lyubertsy
Korenev
Kraskovo
Map
Save as...
Route...
Info

Unnamed road near Moscow

Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➲ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36. ■

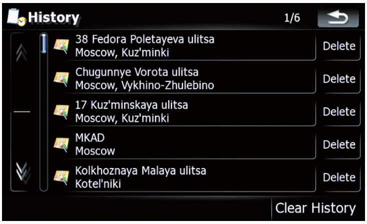
## Selecting a location you searched for recently

The places that you have searched for in the past are automatically stored in "**History**". Selecting the item on the list provides an easy way to specify the position.

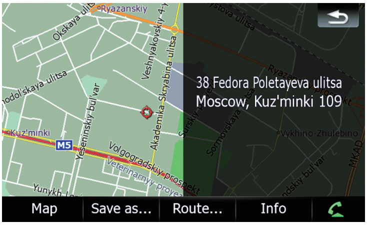
❒ “**History**” can store up to 32 locations. If the entries reach the maximum, the new entry overwrites the oldest one.

**1 Touch [Destination] on the “Top Menu”, and then touch [History].**

**2 Touch the desired entry.**


History 1/6
38 Fedora Poletayeva ulitsa
Moscow, Kuz'minki
Chugunnye Vorota ulitsa
Moscow, Vykhino-Zhulebino
17 Kuz'minskaya ulitsa
Moscow, Kuz'minki
MKAD
Moscow
Kolkhoznaya Malaya ulitsa
Kotel'niki
Delete
Delete
Delete
Delete
Delete
Clear History

**3 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.**


38 Fedora Poletayeva ulitsa
Moscow, Kuz'minki 109
Ryazanskiy
Olskaya ulitsa
Veshnyakovskiy 4-y
Akademika Skryabina ulitsa
odol'skaya ulitsa
Yeseninskiy bul'var
Kuz'minki
M5
Volgogradskiy prospekt
Veterinarnyy proyezd
Yunykh
Vykhino-Zhulebino
MKAD
Map
Save as...
Route...
Info

Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

➲ For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.

## Deleting an entry in “History”

Items in “**History**” can be deleted. All entries in “**History**” can also be deleted at once.

**1 Touch [Destination] on the “Top Menu”, and then touch [History].**

**2 Touch [Delete] on the right of the item that you want to delete.**

**3 Touch [Yes].**

A message will appear asking you to confirm the deletion.

❒ Touching [**Clear History**] allows you to delete all the entries.

❒ Because deleted data cannot be restored, take extra care not to mistakenly delete item. ■

## Selecting a location stored in “Favourites”

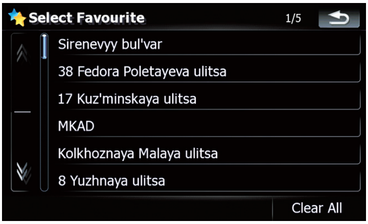
Storing locations you visit frequently saves time and effort.

Selecting the item on the list provides an easy way to specify the position.

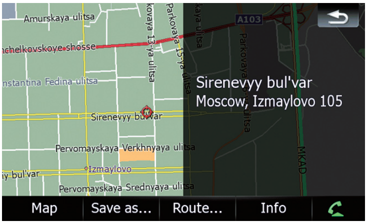
❒ “**Favourites**” can store up to 30 locations.

**1 Touch [Destination] on the “Top Menu”, and then touch [Favourites].**

**2 Touch the desired entry.**


Select Favourite 1/5
Sirenevyy bul'var
38 Fedora Poletayeva ulitsa
17 Kuz'minskaya ulitsa
MKAD
Kolkhoznaya Malaya ulitsa
8 Yuzhnaya ulitsa

### 3 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.


Amurskaya ulitsa
Shchelkovskoye shosse
Konstantina Fedina ulitsa
Sirenevyy bul'var
Pervomayskaya Verkhnyaya ulitsa
Izmaylovo
Pervomayskaya Srednyaya ulitsa
A103
MKAD
Sirenevyy bul'var
Moscow, Izmaylovo 105
Map
Save as...
Route...
Info

Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➲ For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.

## Deleting an entry in “Favourites”

All entries in “**Favourites**” can be deleted at once.

### 1 Touch [Destination] on the “Top Menu”, and then touch [Favourites].

### 2 Touch [Clear All].

A message will appear asking you to confirm the deletion.

### 3 Touch [Yes].

- ❒ Because deleted data cannot be restored, take extra care not to mistakenly delete item. ■

## Setting up a route to your home

If your home location is stored, the route home can be calculated by touching a single key.

### ● Touch [Destination] on the “Top Menu”, and then touch [Return Home].

When the route is not set, route calculation starts immediately.

When the route is already set, a message will appear asking you to cancel the current route. Touch [**Yes**] to start the route calculation.

- ❒ If the home location has not been stored yet, set the location first.
  - ➲ For details, refer to *Setting your home position* on page 119. ■

## Setting a route by recalling a saved route

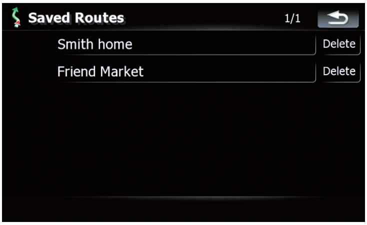
Saving a route enables you to recall the same route. Selecting the item on the list provides an easy way to set the saved route.

Selecting the item on the list provides an easy way to specify the position.

- If there are no entries on the list, save the route first.
  - ➲ For details concerning other operations, refer to *Storing the current route* on page 45.

### 1 Touch [Destination] on the “Top Menu”, and then touch [Saved Routes].

### 2 Touch the desired entry.


Saved Routes
1/1
Smith home
Delete
Friend Market
Delete

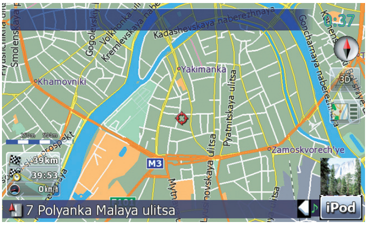
When the route is not set, the saved route is recalled and the guidance will start immediately. ■

## Searching for a location by scrolling the map

Specifying a location after scrolling the map enables you to set the position as an operable target in the "Map Confirmation Screen".

**1 Press MAP button to display the navigation map screen.**

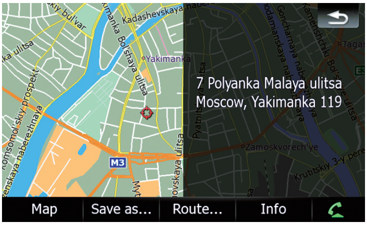
**2 Touch and drag the screen to scroll the map to the desired position.**


Yakimanka
Khamovniki
Zamoskvorech'ye
Kadashevskaya naberezhnaya
Goncharnaya naberezhnaya
Pyatnitskaya ulitsa
M3
3D
39 km
39:53
0 km/h
7 Polyanka Malaya ulitsa
iPod

**3 Touch to display the "Map Confirmation Screen".**

The "Map Confirmation Screen" appears.

**4 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.**



7 Polyanka Malaya ulitsa
Moscow, Yakimanka 119

Map
Save as...
Route...
Info
Yakimanka
Zamoskvorech'ye
M3

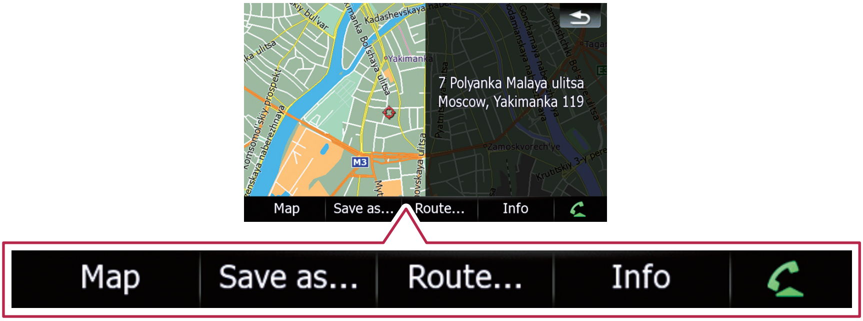
Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on the next page. ■

# After the location is decided (Map Confirmation Screen)

## What you can do with the “Map Confirmation Screen”

Under most conditions after searching for a location, the “Map Confirmation Screen” appears to let you select the next operation. The options shown below are available on this screen:



7 Polyanka Malaya ulitsa
Moscow, Yakimanka 119

### Map

Shows a full-screen 2D map centred on the cursor position.

### Save as...

Places a map pin, and saves the position.

➲ For more details concerning the operation, refer to **Save as...** on the next page.

### Route...

Sets the destination, waypoints, and starting point positions.

➲ For more details concerning the operation, refer to **Route...** on this page.

### Info

Shows detailed information about the location of the cursor position.

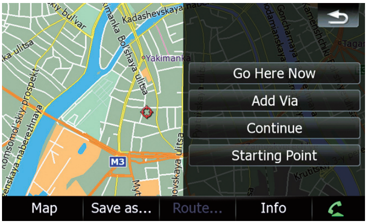
➲ For more details concerning the operation, refer to *Viewing the information of a specified location* on page 38.

### ☎

Enables you to call the position if a telephone number is available. (Pairing with mobile phone featuring Bluetooth wireless technology is required.)

➲ For more details concerning the operation, refer to *Dialling a phone number on the “Map Confirmation Screen”* on page 53. ■

## Route...



### Go Here Now

Calculates the new route by setting the cursor position as the new destination.

➲ For more details concerning the operation, refer to *Setting the location as a new destination* on the next page.

### Add Via

Recalculates the route by adding the cursor position as a waypoint.

➲ For more details concerning the operation, refer to *Setting the location as a waypoint* on the next page.

### Continue

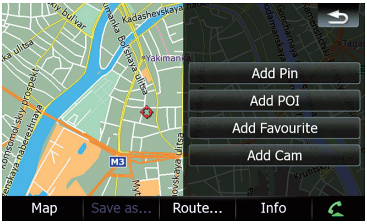
Recalculates the route by setting the cursor position as the new destination. The previous destination becomes a waypoint.

➲ For more details concerning the operation, refer to *Replacing the location as the new final destination* on this page.

**Starting Point**
Sets the location as a starting point.

➲ For more details concerning the operation, refer to *Setting the location as the start point* on the next page. ■

## Save as...



**Add Pin**
Puts a map pin at the cursor position as a mark up.

➲ For details, refer to *Placing a map pin on the location* on the next page.

**Add POI**
Stores the cursor position as a POI.

➲ For details, refer to *Registering the location as a customised POI* on page 39.

**Add Favourite**
Stores the cursor position as one of the "**Favourites**".

➲ For details, refer to *Storing the location in "***Favourites***"* on page 40.

**Add Cam**
Stores the cursor position as a safety camera location.

➲ For details, refer to *Storing the position as safety camera location* on page 40. ■

## Setting the location as a new destination

### 1 Touch [Route...] on the "Map Confirmation Screen".

### 2 Touch [Go Here Now].

When the route is not set, route calculation starts immediately.
When the route is already set, a message will appear asking you to cancel the current route. Touch [**Yes**] to start the route calculation.

- ❒ When the cursor overlaps with a destination that has already been set, touch [**Remove Dest.**] to cancel the current route or recalculate the route by setting one of the remaining waypoints as the destination. ■

## Setting the location as a waypoint

### 1 Touch [Route...] on the "Map Confirmation Screen".

### 2 Touch [Add Via].

When no waypoint is set, route calculation starts immediately.

- ❒ When the cursor overlaps a waypoint already set, touch [**Remove Via**] to delete the waypoint and recalculate the route. ■

## Replacing the location as the new final destination

### 1 Touch [Route...] on the "Map Confirmation Screen".

### 2 Touch [Continue].

- ❒ Recalculates the route by setting the cursor position as the new destination. The previous destination becomes a waypoint. ■

## Setting the location as the start point

Only setting the starting point is performed when there is no route. Otherwise, the new route from the starting point to the current destination will be recalculated.

**1 Touch [Route...] on the "Map Confirmation Screen".**

**2 Touch [Starting Point].**

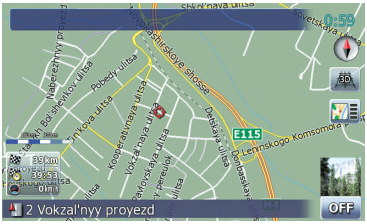
❒ When the cursor overlaps with a starting point already set, It changes to [**Remove Start**]. All waypoints already set are deleted. ■

## Viewing the information of a specified location

Locating the cursor to your desired position enables you to view detailed information about the location by using the "Map Confirmation Screen".

**1 Press MAP button to display the navigation map screen.**

**2 Touch and drag the screen to scroll the map to the desired position.**

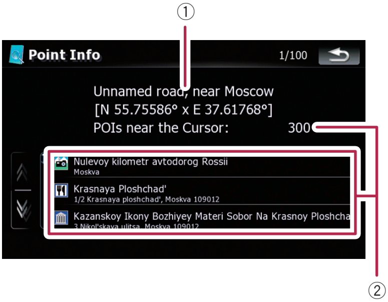


**3 Touch ▦ to display the "Map Confirmation Screen".**

The "Map Confirmation Screen" appears.

**4 Touch [Info] at the bottom of the "Map Confirmation Screen".**

The "**Point Info**" screen appears.



Unnamed road, near Moscow
[N 55.75586° x E 37.61768°]
POIs near the Cursor: 300

Nulevoy kilometr avtodorog Rossii
Moskva

Krasnaya Ploshchad'
1/2 Krasnaya ploshchad', Moskva 109012

Kazanskoy Ikony Bozhiyey Materi Sobor Na Krasnoy Ploshcha
3 Nikol'skaya ulitsa, Moskva 109012

① The address and coordinates
② Information about a nearby POI

**5 Touch ▲ or ▼ to scroll the nearby POI list and then touch the desired POI.**

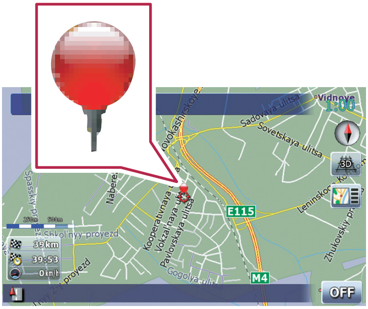
Touching one of the listed POIs enables you to view more detailed information about the POI.

**6 Touch [OK].**

If you touch [**OK**], the "Map Confirmation Screen" appears with a focus on the selected POI. ■

## Placing a map pin on the location

The pin-shaped icons called "map pins" can be used just like markers. Placing the coloured pins on the map makes the position stand out and helps you to find the position easily later.



# After the location is decided (Map Confirmation Screen)

**1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the "Map Confirmation Screen".**

**2 Touch [Save as...] on the "Map Confirmation Screen".**

**3 Touch [Add Pin].**

The pin-shaped icon is placed on the map and the screen returns to the map screen.

- ❐ The colour of pin-shaped icon is assigned automatically within predefined colours when you set it up.

## Removing a map pin

When the cursor overlaps a map pin that has already been set, you can remove the map pin.

**1 Locate the cursor at the pin-shaped icon and display the "Map Confirmation Screen".**

**2 Touch [Save as...] on the "Map Confirmation Screen".**

**3 Touch [Remove Pins].**

The pin-shaped icon is removed and the screen returns to the map screen. ■

## Registering the location as a customised POI

If a new business has opened, it may not be found in the database. Registering the location as a new POI allows you to use the item just like a preinstalled POI.

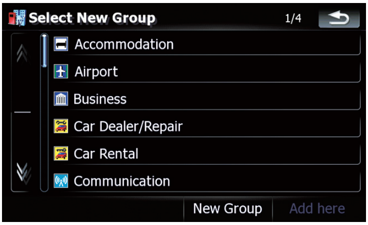
**1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the "Map Confirmation Screen".**

**2 Touch [Save as...] on the "Map Confirmation Screen".**

**3 Touch [Add POI].**

The list of POI categories appears.

**4 Touch the desired category to which the location is to be assigned.**



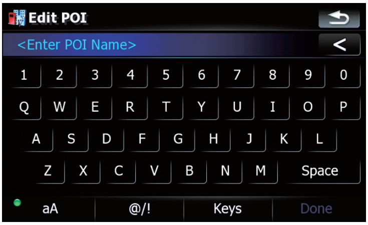
If there are more detailed categories within the selected category, repeat this step as many times as necessary.

**5 Touch [Add here] when the desired category list appears to add the item to it.**

If there aren't any more detailed categories, the blank list appears. In such case, touching [**Add here**] allows you to add the item and register it as an item belonging to the category that you selected on the previous screen.

- ❐ Touching [**Add here**] without selecting any category is invalid.

**6 Enter the desired name and then touch [Done] to complete the entry.**



The registration is now complete and the item is available as a customised POI.

- ❐ You can edit the stored POI later in "**Manage POI**".
- ➲ For more details concerning the operation, refer to *Editing your customised POI* on page 117. ■

## Storing the location in “Favourites”

Storing your favourite locations as “**Favourites**” provides you with the opportunity to save the time and effort of re-entering this information. Stored items can be made available on “**Favourites**” later.

➲ For more details concerning the operation, refer to *Selecting a location stored in “***Favourites***”* on page 33.

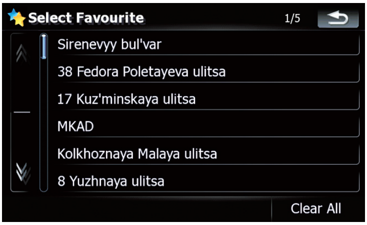
❒ “**Favourites**” can store up to 30 locations.

**1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the “Map Confirmation Screen”.**

**2 Touch [Save as...] on the “Map Confirmation Screen”.**

**3 Touch [Add Favourite].**

**4 Touch the desired entry.**



Select Favourite 1/5

Sirenevyy bul'var

38 Fedora Poletayeva ulitsa

17 Kuz'minskaya ulitsa

MKAD

Kolkhoznaya Malaya ulitsa

8 Yuzhnaya ulitsa

Clear All

Selecting an item that has already been stored allows you to overwrite it.

**5 Enter the desired name and then touch [Done] to complete the entry.**

Storage has been completed and the item is available as a preset entry on “**Favourites**”. ■

## Deleting an entry in “Favourites”

All entries in “**Favourites**” can be deleted at once.

**1 Touch [Destination] on the “Top Menu”, and then touch [Favourites].**

**2 Touch [Clear All].**

A message will appear asking you to confirm the deletion.

**3 Touch [Yes].**

❒ Because deleted data cannot be restored, take extra care not to mistakenly delete item. ■

## Storing the position as safety camera location

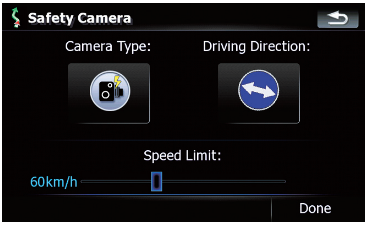
Storing a position as a road safety camera location enables the navigation system to warn you when you approach a camera location. These locations are shown by camera icons.

**1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the “Map Confirmation Screen”.**

**2 Touch [Save as...] on the “Map Confirmation Screen”.**

**3 Touch [Add Cam].**

**4 Touch the key under “Camera Type:” to display the selection screen.**



Safety Camera

Camera Type:

Driving Direction:

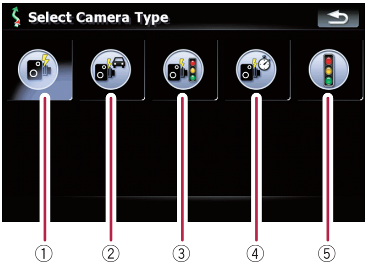
Speed Limit:

60km/h

Done

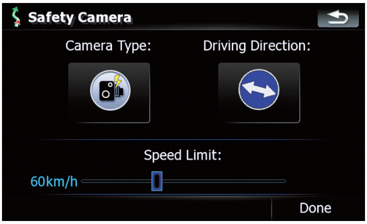
# After the location is decided (Map Confirmation Screen)

**5 Touch the desired camera type to assign a type category.**

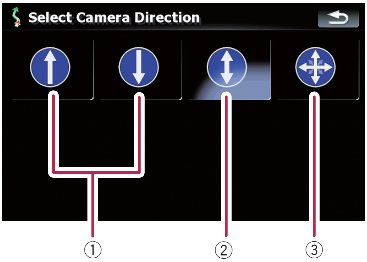

Select Camera Type
①
②
③
④
⑤

Available options;
① Fixed cameras
② Mobile cameras
③ Built-in cameras
④ Section control cameras
⑤ Red light cameras

**6 Touch the key under "Driving Direction:" to display the selection screen.**


Safety Camera
Camera Type:
Driving Direction:
Speed Limit:
60km/h
Done

**7 Touch the desired direction to assign a directional property.**


Select Camera Direction
①
②
③

Available options;
① Uni-directional type
② Bi-directional type
③ Omni-directional type

**8 Touch anywhere on the bar or drag the slider under "Speed Limit:" to set the speed limit.**

If you try to pass through the camera location area in excess of the speed limit, the navigation system will warn you. ■

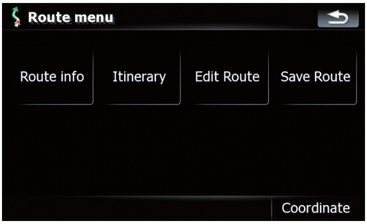
## Checking the current route conditions

The “**Route Information**” screen provides you with various detailed information about the current route.
This is an example showing a route with two waypoints.

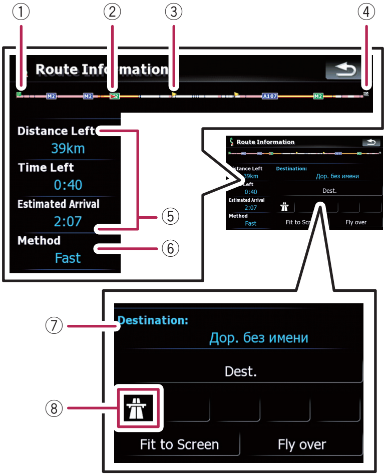
- ❐ This function is available only when the route is set and your vehicle position is on the route.
- ❐ You can also display the “**Route Information**” screen by touching “**Multi-Info window**” on the map screen.
  - ➲ For details, refer to **Multi-Info window** on page 21.

**1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].**

**2 Touch [Route info].**



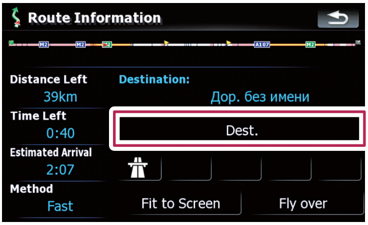
The “**Route Information**” screen appears.



Distance Left 39km
Time Left 0:40
Estimated Arrival 2:07
Method Fast
Destination: Дор. без имени
Dest.

① Starting point
② Current position
③ Waypoint
④ Destination
⑤ Time and distance up to the point currently shown
The remaining distance and time, as well as the estimated time of arrival are displayed.
⑥ The route calculation method that is currently set “**Method:**”
➲ For details, refer to **Route** on page 112.
⑦ Point currently shown and information regarding the point
⑧ The route conditions up to the point currently shown
Touching the icon enables you to check the details. If there are five or more icons, touch → to show the next four icons.

### 3 Touch [Dest.] to switch to the screen for first waypoint.



Route Information

Distance Left 39km

Destination: Дор. без имени

Time Left 0:40

Estimated Arrival 2:07

Method Fast

The "**Route Information (to via)**" screen appears.

### 4 Touch [Via] to switch to the second waypoint screen.

The "**Route Information (to via)**" screen for next waypoint appears.

### 5 Touch [Via] to return to the screen for whole route.

The "**Route Information**" screen appears.

- ❒ If three or more waypoints are set, each touch of [**Via**] shows the screen for the next waypoint.

## Playing simulated travel at high speed

This function allows you to play the simulated navigation function at high speed without voice guidance. This function is useful if you want to browse how the current route will be navigated.

### 1 Touch [Destination] on the "Top Menu", and then touch [Route Function].

### 2 Touch [Route info].

The "**Route Information**" screen appears.

### 3 Touch [Fly over].

The simulation will start.

- ❒ If you want to stop the simulation, touch 🟩 on the map.

## Checking the entire route overview on the map

You can check the entire outline of the current route.

### 1 Touch [Destination] on the "Top Menu", and then touch [Route Function].

### 2 Touch [Route info].

The "**Route Information**" screen appears.

### 3 Touch [Fit to Screen].

A 2D map screen will appear with the current overall route fitted onto the screen. ■

## Checking the current itinerary

You can check the route details.

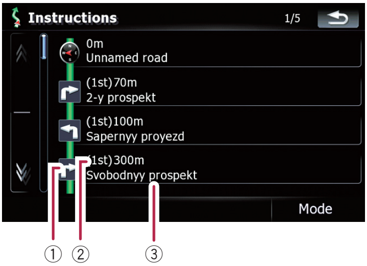
- ❒ This function is available only when the route is set and your vehicle position is on the route.

### 1 Touch [Destination] on the "Top Menu", and then touch [Route Function].

### 2 Touch [Itinerary].

### 3 Touch ▲ or ▼ to scroll the list.

Scroll the list as necessary.



Instructions 1/5

0m Unnamed road

(1st)70m 2-y prospekt

(1st)100m Sapernyy proyezd

(1st)300m Svobodnyy prospekt

① Turning direction
② Driving distance
③ Names of the streets you are driving through

### 4 Touch [Mode].

Each touch of [**Mode**] changes the list mode.

Alternative options:

- **Detailed Instructions**
  All turning points, passed streets and other information is shown.
- **Instructions**
  All turning points (where voice guidance is given) are shown.
- **Road List**
  Displays the turning points with the most simplified condition (the duplicate route names are merged into one).

❒ When a long distance route is calculated, your navigation system may not be able to list all roads. (In this case, the remaining roads will be shown in the list as you drive on.) ■

# Editing waypoints

You can edit waypoints (locations you want to visit on the way to your destination) and recalculate the route so that is passes through these locations.

## Adding a waypoint

**1 Search for a location.**

- ➲ For more details, refer to the descriptions from page 25 to page 35.

**2 Touch [Route...] on the “Map Confirmation Screen”.**

**3 Touch [Add Via].**

When no waypoint is set, route calculation starts immediately.

- ➲ For more details concerning the operation, refer to *Sorting waypoints* on this page.
- ❒ When you set waypoints in the route to your destination, the route up to the next waypoint will appear in light green. The rest of the route will appear in light blue.

## Sorting waypoints

You can sort waypoints and recalculate the route.

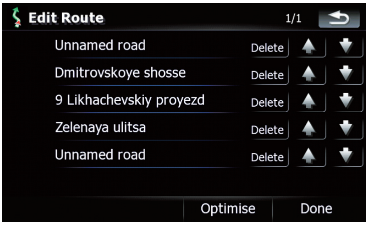
**1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].**

**2 Touch [Edit Route].**

The “**Edit Route**” screen appears.

**3 Touch [↑] or [↓] to move the waypoint or destination.**

Put them in the desired order.



Touching [**Optimise**] sorts the waypoints automatically so that the route will compromise the least time and distance.

**4 Touch [Done].**

The route is recalculated and the map of the current position appears.

## Deleting a waypoint

You can delete waypoints from the route and then recalculate the route. (You can delete waypoints successively.)

**1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].**

**2 Touch [Edit Route].**

The “**Edit Route**” screen appears.

**3 Touch [Delete] on the right of the waypoint that you want to delete.**

The waypoint will be deleted from the list.

**4 Touch [Done].**

The route is recalculated and the map of the current position appears. ■

# Storing the current route

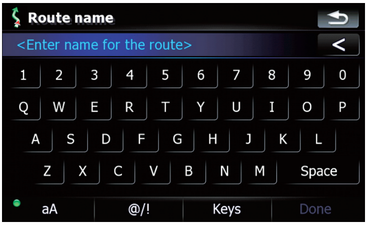
Storing the current route allows you to recall and set the stored route.

- ❒ This function is available only when the route is set and your vehicle position is on the route.

**1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].**

**2 Touch [Save Route].**

**3 Enter the desired name and then touch [Done] to complete the entry.**



The previous screen appears.

## Deleting the entry in "Saved Routes"

**1 Touch [Destination] on the "Top Menu", and then touch [Saved Routes].**

**2 Touch [Delete] on the right of the item that you want to delete.**

- ❐ Because deleted data cannot be restored, take extra care not to mistakenly delete item. ■

# Deleting the current route

If you no longer need to travel to your destination, follow the steps below to delete the current route and cancel the route guidance.

**1 Touch [Destination] on the "Top Menu", and then touch [Delete Route].**
A message confirming the cancellation of the current route appears.

**2 Touch [Yes].** ■

## Hands-free phoning overview

**CAUTION**

For your safety, avoid talking on the phone as much as possible while driving.

If your mobile phone features Bluetooth® technology, this navigation system can be connected to your mobile phone wirelessly. Using this hands-free function, you can operate the navigation system to make or receive phone calls. You can also transfer the phone book data stored in your mobile phone to the navigation system. This section describes how to set up a Bluetooth connection and how to operate a mobile phone featuring Bluetooth technology on the navigation system.

> For more information about the connectivity with the mobile phone featuring Bluetooth wireless technology, refer to the information on our website.

■

## Preparing communication devices

This navigation system has a built-in function to use mobile phones featuring Bluetooth wireless technology.
While your mobile phone featuring Bluetooth wireless technology is connected, the Bluetooth connection status indicator lights.

➲ For details, refer to *Notes for hands-free phoning* on page 57.

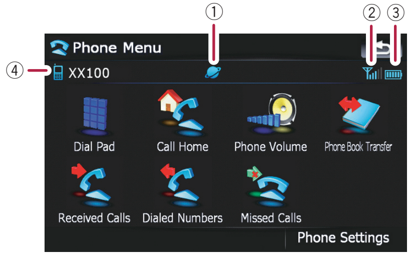
❒ When the power of the navigation system turns off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously-connected mobile phone. Even when the connection is severed for some reason, the system automatically reconnects the specified mobile phone (except when the connection is severed due to mobile phone operations). ■

## Displaying the Phone Menu

Use the "**Phone Menu**" if you connect the mobile phone to the navigation system for utilisation.

**1 Press MENU button to display the "Top Menu".**

**2 Touch [Phone].**



① : Network name of the mobile phone company
② : Reception status of the mobile phone
③ : Battery status of the mobile phone
④ : Name of connected mobile phone ■

## Registering your mobile phone

You need to register your mobile phone featuring Bluetooth wireless technology when you connect it for the first time. A total of three phones can be registered. Three registration methods are available:

- Searching for nearby phones
- Searching for a specified phone
- Pairing from your mobile phone

❒ If you try to register more than three mobile phones, the system will ask you to select one of the registered mobile phones to overwrite.

➲ For details, refer to *Connecting a registered mobile phone* on page 50.

❒ The default device name displayed on the mobile phone is "**Pioneer Navi**". The PIN code is "**1111**".

## Searching for nearby phones

The system searches for available mobile phones near the navigation system and displays them in a list, and registers them for connection.

**1 Activate the Bluetooth wireless technology on your mobile phone.**

For some mobile phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your mobile phone.

**2 Touch [Phone Settings] on the "Phone Menu".**

➲ For details, refer to *Displaying the* **Phone Menu** on the previous page.

**3 Touch [Connection].**

**4 Touch [Add Device], and then [Search devices].**

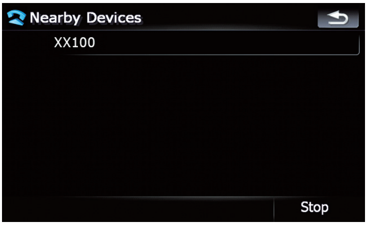
The system searches for mobile phones with Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.

❒ Up to 10 mobile phones will be listed in the order that the mobile phone is found.

**5 Wait until your mobile phone appears in the list.**

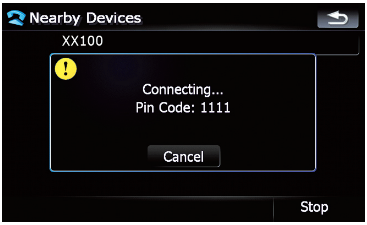
❒ If you cannot find the mobile phone you want to connect, check that the mobile phone is waiting for the Bluetooth wireless technology connection.

**6 Touch the mobile phone name you want to register.**



A message promptings you to enter a PIN code appears.

**7 Enter the PIN code "1111" using the mobile phone.**



Connecting...
Pin Code: 1111

When a connection is successfully established, a connection complete message appears, the screen returns to the "**Phone Settings**" menu by touching [**OK**].

## Searching for a specified phone

If you cannot connect your phone in the regular two methods previously described, try this method if your phone is found in the list.

**1 Activate the Bluetooth wireless technology on your mobile phone.**

For some mobile phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your mobile phone.

**2 Touch [Phone Settings] on the "Phone Menu".**

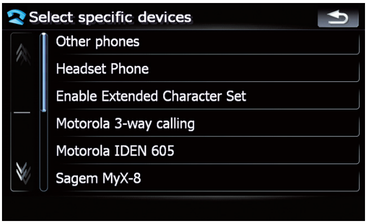
➲ For details, refer to *Displaying the* **Phone Menu** on the previous page.

**3 Touch [Connection].**

**4 Touch [Add Device], and then [Select specific devices].**

### 5 Touch the model name of the mobile phone to be connected.

The system searches for mobile phones with Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.

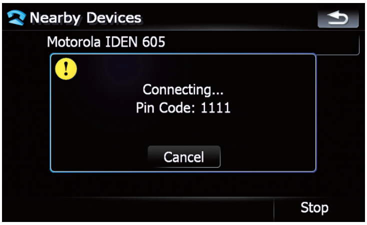

Select specific devices
Other phones
Headset Phone
Enable Extended Character Set
Motorola 3-way calling
Motorola IDEN 605
Sagem MyX-8

❒ If you cannot find the desired model name on the list, touch [**Other phones**] to search the mobile phones available nearby.

### 6 Select the mobile phone you want to register from the list.

A message promptings you to enter a PIN code appears.

### 7 Enter the PIN code “1111” using the mobile phone.


Nearby Devices
Motorola IDEN 605
Cancel
Stop

Connecting...
Pin Code: 1111

When a connection is successfully established, a connection complete message appears, the screen returns to the “**Phone Settings**” menu by touching [**OK**].

## Pairing from your mobile phone

You can register the mobile phone by setting the navigation system to standby mode and requesting connection from the mobile phone.

### 1 Activate the Bluetooth wireless technology on your mobile phone.

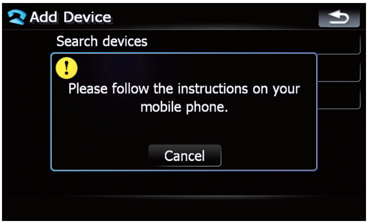
For some mobile phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your mobile phone.

### 2 Touch [Phone Settings] on the “Phone Menu”.

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 3 Touch [Add Device], and then [Pair from the mobile phone].

The navigation system waits for a Bluetooth wireless technology connection.

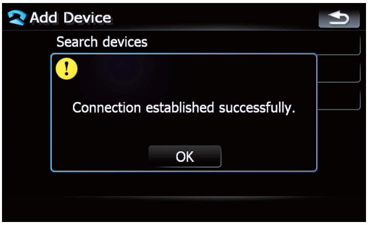

Add Device
Search devices
Cancel

Please follow the instructions on your mobile phone.

### 4 Register the navigation system on your mobile phone.

If your mobile phone asks you to enter a password, enter the PIN code (password) of the navigation system.

After the registration is completed, the following screen appears.


Add Device
Search devices
OK

Connection established successfully.

❒ If registration fails repeat the procedure from the beginning. ■

## Connecting a registered mobile phone

The navigation system automatically connects the mobile phone selected as the target of connection. However, connect the mobile phone manually in the following cases:

- Two or more mobile phones are registered, and you want to manually select the mobile phone to be used.
- You want to reconnect a disconnected mobile phone.
- Connection cannot be established automatically for some reason.

If you start connection manually, carry out the following procedure. You can also connect the phone by having the navigation system detect it automatically.

➲ For details, refer to *Setting the automatic connection* on page 57.

### 1 Activate the Bluetooth wireless technology on your mobile phone.

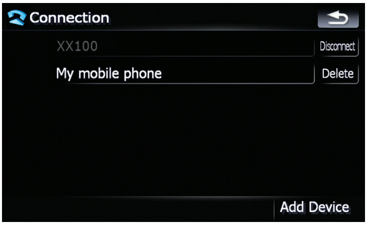
For some mobile phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your mobile phone.

### 2 Touch [Phone Settings] on the "Phone Menu".

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 3 Touch [Connection].

### 4 Touch the name of the mobile phone that you want to connect.



Connection starts.

When a connection is successfully established, a connection complete message appears, the screen returns to the "**Phone Settings**" menu by touching [**OK**].

❒ If another mobile phone is already connected, touch [**Disconnect**] next to the mobile phone name to disconnect it, and start connection.

❒ To cancel the connection to your mobile phone, touch [**Cancel**].

❒ If connection fails, check to see whether your mobile phone is waiting for a connection and then retry.

## Disconnecting a mobile phone

### 1 Touch [Phone Settings] on the "Phone Menu".

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 Touch [Connection].

### 3 Touch [Disconnect] next to the mobile phone name.

## Deleting a registered phone

If you no longer need to use a registered phone with the navigation system, you can delete it from the registration assignment to free this spot up for another phone.

❒ If a registered phone is deleted, all the phone book entries and call history lists that correspond to the phone will be also cleared.

### 1 Touch [Phone Settings] on the "Phone Menu".

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 Touch [Connection].

### 3 Touch [Delete] next to the mobile phone name.

The registration is cancelled. ■

# Receiving a phone call

You can perform hands-free answering by using the navigation system.

## Answering an incoming call

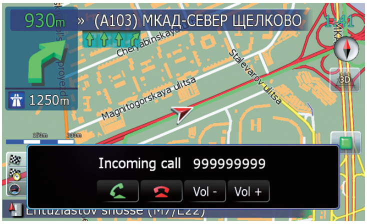
The system informs you that it is receiving a call by displaying a message and producing a ring sound once.
If [**Auto Answer Preference**] is set to [**Off**], answer the call manually. Answering is available if any screen is displayed, such as the map screen or the setting screen.

- ❐ You can set this navigation system to automatically answer incoming calls.
  - ➲ For details, refer to *Answering a call automatically* on page 56.

**1 When a call comes in, the answering operation menu appears on the bottom of the screen.**

- ❐ You cannot carry out operations other than answering calls.

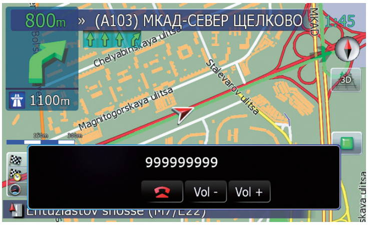
**2 To answer an incoming call, touch ☎.**


930m
» (A103) МКАД-СЕВЕР ЩЕЛКОВО
1250m
Chelyabinskaya
Magnitogorskaya ulitsa
Stalevarov ulitsa
3D
Vol -
Vol +

Incoming call 999999999

When there is an incoming call, you can reject the call by touching ☎.

- ❐ You can adjust volume when you are talking. To adjust volume, touch [**Vol -**] and [**Vol +**] displayed on the screen (like below) when you are talking.


800m
» (A103) МКАД-СЕВЕР ЩЕЛКОВО
1100m
Chelyabinskaya ulitsa
Magnitogorskaya ulitsa
Stalevarov ulitsa
MKAD
3D
Vol -
Vol +

999999999

**3 Touch ☎ to end the call.**

The call ends.

- ❐ When there is an incoming call, pressing **MULTI-CONTROL** answers the call. During the call, pressing **MULTI-CONTROL** gets you off the phone.
- ❐ If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
  - ➲ For more details about "**Phone Volume**", refer to *Setting the phone volume* on page 55.
- ❐ You may hear a noise when you hang up the phone.

## Rejecting an incoming call

You can reject an incoming call.

➲ For details, refer to *Answering a call automatically* on page 56.

**● When a call comes in, touch ☎.**

The call is rejected.

- ❐ The rejected call is recorded in the missed call history list.
  - ➲ For details, refer to *Dialling from the history* on the next page. ■

# Making a phone call

You can make a phone call in many different ways.

## Direct dialling

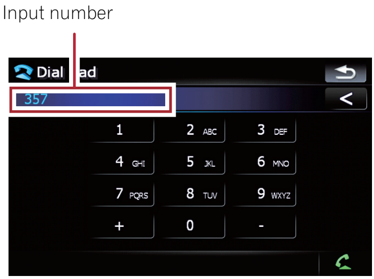
### 1 Touch [Dial Pad] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

The direct dial screen appears.

### 2 Touch the number keys to enter the phone number.

The phone number that was input is displayed.



**< :**
The input number is deleted letter-by-letter from the end of the number. Continuing to press this deletes all of the numbers.

**↩ :**
Return to the previous screen.

### 3 Touch ☎ to make a call.

- ❒ To cancel the call after the system starts dialling, touch ☎.

### 4 Touch ☎ to end the call.

## Dialling from the history

The most recent calls made (dialled), received and missed are stored in the call history list. You can browse the call history list and call numbers from it.

### Making a phone call using the dialled number history

The dialled number history saves 30 calls per registered mobile phone. If the entries exceed 30, the oldest one will be deleted.

### 1 Touch [Dialed Numbers] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 If you touch an entry on the list, dialling starts.

- ❒ If you touch [**Detail**], you can check the details of the party before making a phone call.
- ❒ To cancel the call after the system starts dialling, touch ☎.

### 3 Touch ☎ to end the call.

### Making a phone call using the received call history

The received call history saves 30 calls per registered mobile phone. If the number of calls exceeds 30, the oldest entry will be deleted.

### 1 Touch [Received Calls] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 If you touch an entry on the list, dialling starts.

- ❒ If you touch [**Detail**], you can check the details of the party before making a phone call.
- ❒ To cancel the call after the system starts dialling, touch ☎.

### 3 Touch ☎ to end the call.

### Making a phone call using missed call history

The missed call history saves 20 calls per registered mobile phone. If the number of calls exceeds 20, the oldest entry will be deleted.

### 1 Touch [Missed Calls] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 If you touch an entry on the list, dialling starts.

- ❒ If you touch [**Detail**], you can check the details of the party before making a phone call.
- ❒ To cancel the call after the system starts dialling, touch ☎.

### 3 Touch ☎ to end the call.

## Calling a number in the "Contacts" screen

After finding the entry you want to call in the "**Contacts**" screen, you can select the number and make the call.

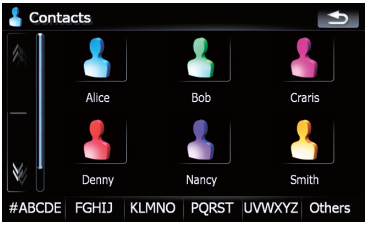
### 1 Press MENU button to display the "Top Menu".

### 2 Touch [Contacts].

The "**Contacts**" screen appears.

### 3 Switch the page of the list to display the desired entry.

If you touch an alphabet tab, you can jump to the first page of the contacts whose names start with that letter.


Contacts
Alice
Bob
Craris
Denny
Nancy
Smith
#ABCDE
FGHIJ
KLMNO
PQRST
UVWXYZ
Others

**⇑ or ⇓**:
Shows the next or previous page.
**Alphabet tabs**
Makes the screen jump to the beginning of the page including the entry whose names start with any of selected alphabets.
Touching [**#ABCDE**] also displays the page including the entry whose names start with primary symbols or numbers.
Touching [**Others**] displays the page including entries that are not assigned to any of the other tabs.

### 4 Touch the desired entry on the list to make a call.

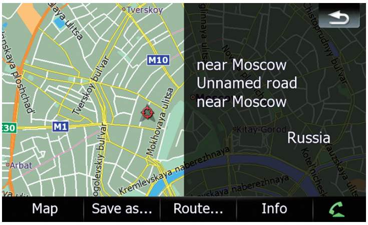
### 5 Touch ☎ to end the call.

## Dialling a phone number on the "Map Confirmation Screen"

You can make a call to the searched location or the location that you are selecting on the map screen if the telephone number exists.

### 1 To display the "Map Confirmation Screen", search for a locations or moves the cursor and touch ▦ .

### 2 Touch ☎ to make a call.


Tverskoy
M10
M1
Arbat
Tverskoy bul'var
Mokhovaya ulitsa
Kremlevskaya naberezhnaya
Kitay-Gorod
near Moscow
Unnamed road
near Moscow
Russia
Map
Save as...
Route...
Info

To cancel the call after the system starts dialling, touch ☎.

### 3 Touch ☎ to end the call.

## Making a call home easily

You can call home without taking the time to enter the phone number if the phone number has been registered.

### ● Touch [Call Home] on the "Phone Menu".

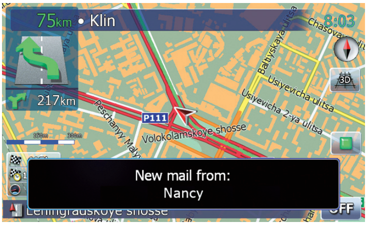
Dialling home starts.

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

- ❐ If you have not registered your home number, a message appears. Touch [**Yes**] to start registration.
  - ➲ For more details about “**Set Home**”, refer to *Setting your home position* on page 119. ■

## Announcing incoming short mails

While the mobile phone and the navigation system are connected, the following notice is displayed when you get a new SMS message. “**New mail from:** (sender’s name)” is displayed and the notice disappears after eight seconds.



New mail from:
Nancy

- ❐ If you want to delete the message, touch anywhere on the screen.
- ❐ If the voice language with TTS is currently used, the audible message can be output.
  - ➲ For details, refer to *Selecting the language* on page 120. ■

## Transferring the phone book

You can transfer the numbers in a registered user phone’s address book into the phone book.

- ❐ With some mobile phones, it may not be possible to transfer the entire phone book at once. In this case, transfer addresses one at a time from your phone book using your mobile phone.
- ❐ The maximum 400 entries can be transferred per mobile phone. If the entries exceed 400, the extra entries will not be transferred. If more than one number is registered for one person, such as work place and home, each number is counted separately.
- ❐ Each entry can hold up to 3 phone numbers.
- ❐ Depending on the mobile phone that is connected to this navigation system via Bluetooth technology, this navigation system may not be able to display the phone book correctly. (Some characters may be garbled.)
- ❐ If the phone book in the mobile phone contains image data, the phone book may not be correctly transferred.

**1 Connect the mobile phone that has the phone book to transfer.**

➲ For details, refer to *Connecting a registered mobile phone* on page 50.

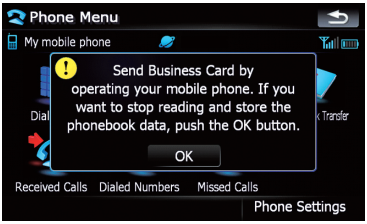
**2 Touch [Phone Book Transfer] on the “Phone Menu”.**

The confirmation messages appear.

**3 Check the messages and touch [OK].**

- ❐ If there is a phone book already transferred, a message asking whether you can accept the data replacement appears.

**4 Check that the following screen is displayed, and operate your mobile phone to transfer the phone book entries.**



Send Business Card by operating your mobile phone. If you want to stop reading and store the phonebook data, push the OK button.

Transfer starts. It may take time depending on how many entries will be transferred.

- ❒ You can send the phone book entries repeatedly before touching [**OK**]. If your mobile phone supports one-by-one transfer only, send all the entries that you want to transfer before touching [**OK**].
- ❒ If your phone has a capability for automatic transfer of phone book, this screen is skipped and transfer will start.
- ❒ The transferred data can not be edited on the navigation system.

### 5 When the completion message appears, check the message and touch [OK].

Transfer ends. ■

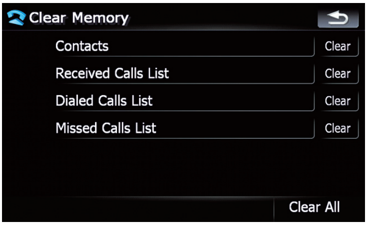
## Clearing memory

You can clear the memory of each item that corresponds to the connected mobile phone: phone book, dialled/received/missed call history list and preset dials.

### 1 Touch [Phone Settings] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 Touch [Clear Memory].



On this screen, you can select the following items:

**Contacts:**

You can clear the registered phone book.

**Received Calls List:**

You can clear the received call history list.

**Dialed Calls List:**

You can clear the dialled call history list.

**Missed Calls List:**

You can clear the missed call history list.

- ❒ Touching [**Clear**] displays the confirmation message for clearing the memory.
- ❒ Touching [**Clear All**] clears all the data that correspond to the connected mobile phone.

### 3 Touch [OK].

Data on the selected item is cleared from this navigation system’s memory.

- ❒ If you do not want to clear memory that you have selected, touch [**Cancel**]. ■

## Setting the phone

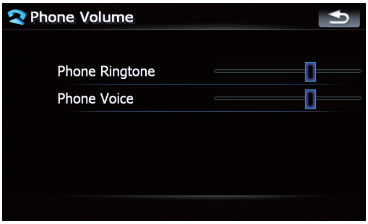
### Setting the phone volume

The volume level related with the hands-free phoning can be adjusted.

### 1 Touch [Phone Volume] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

### 2 Adjust volume to touch the sliders of [Phone Ringtone] and [Phone Voice].



[**Phone Ringtone**]:

This setting controls the incoming ring tone volume.

[**Phone Voice**]:

This setting controls the incoming voice volume.

- ❒ Phone volume varies depending on the incoming mobile's phone, volume setting and other conditions.

- ➲ For details concerning operations, refer to *Answering an incoming call* on page 51.

## Stopping Bluetooth wave transmission

You can stop transmission of electric waves by turning off the Bluetooth function. If you do not use the Bluetooth wireless technology, we recommend selecting [**Off**].

**1 Touch [Phone Settings] on the "Phone Menu".**

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch [Off] on [Bluetooth On/Off].**

Touching [**Bluetooth On/Off**] switching between [**On**] and [**Off**].

## Answering a call automatically

The navigation system automatically answers an incoming call to the mobile phone. You can answer a call while holding the steering wheel while you are driving.

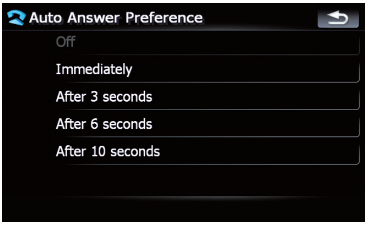
**1 Touch [Phone Settings] on the "Phone Menu".**

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch any key next to [Auto Answer Preference] (such as [Off], [After 3 seconds] keys).**

Auto Answer Preference selection appears.

**3 Touch the item to configure.**



[**Off**]: No automatic response. Respond manually
[**Immediately**]: Answers immediately
[**After 3 seconds**]: Answers after three seconds
[**After 6 seconds**]: Answers after six seconds
[**After 10 seconds**]: Answers after ten seconds

## Setting the automatic rejection function

If this function is on, the navigation system automatically rejects all incoming calls.

**1 Touch [Phone Settings] on the "Phone Menu".**

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch [Refuse All Calls].**

Touching [**Refuse All Calls**] switches between [**On**] and [**Off**].

- ❒ If both the automatic reject and automatic answer functions are set to [**On**], automatic reject is prioritised and all incoming calls are automatically rejected.
- ❒ If the [**Refuse All Calls**] is set to [**On**], rejected incoming calls will not be stored in the missed call list.

## Echo cancelling and noise reduction

When you are operating hands-free phoning in the vehicle, you may hear an undesired echo. This function reduces the undesired echo and noise while you are doing hands-free phoning, and maintains a certain sound quality.

**1 Touch [Phone Settings] on the “Phone Menu”.**

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch [Echo Cancel].**

Touching [**Echo Cancel**] switches between [**On**] and [**Off**].

## Setting the automatic connection

When an automatic connection is active, the navigation system will automatically establish a connection with a registered phone when it comes into range. Using this feature will release you from all of the processes for establishing a connection.

❐ With some mobile phones, it may not be possible to perform automatic connection.

❐ This unit does not initiate an automatic connection to your registered phone while you are operating in the “**Function**” menu for hands-free phoning.

**1 Touch [Phone Settings] on the “Phone Menu”.**

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch [Auto Connect].**

Touching [**Auto Connect**] switches between [**On**] and [**Off**].

❐ Automatic connection is performed in the registration number order.

❐ Some mobile phones do not support automatic connection.

## Editing the device name

You can change the device name to be displayed on your mobile phone. (Default is [**Pioneer Navi**].)

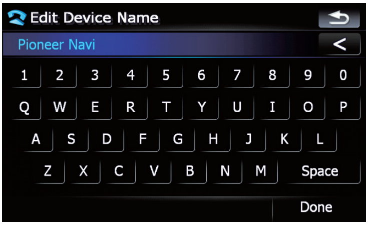
**1 Touch [Phone Settings] on the “Phone Menu”.**

➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch [Edit Name].**

The keyboard to enter the name appears.

**3 Touch < to delete the current name, and enter the new name by using the keyboard.**



Edit Device Name

Pioneer Navi

**4 Touch [Done].**

The name is changed.

❐ Up to 30 characters can be entered for a device name. ■

## Notes for hands-free phoning

### General notes

- Connection to all mobile phones featuring Bluetooth wireless technology is not guaranteed.
- The line-of-sight distance between this navigation system and your mobile phone must be 10 metres or less when sending and receiving voice and data via Bluetooth technology. However, the transmission distance may become shorter than the estimated distance, depending on the environment in use.

- With some mobile phones, the speakers of the system may not produce a ring sound.
- If private mode is selected on the mobile phone, hands-free phoning may not be performed.

### Registration and connection

- Mobile phone operations vary depending on the type of mobile phone. Refer to the instruction manual that came with your mobile phone for detailed instructions.
- Depending on the mobile phone, transferring phone book may not work even though your phone can be pairing with the navigation system. In such case, disconnect your phone, perform pairing again from your phone to the navigation system, and then perform the phone book transfer.

### Making and receiving calls

- You may hear a noise in the following situations:
  - When you answer the phone by using the button on the phone.
  - When the person on the other end of line hangs up the phone.
- If the person on the other end of the phone call cannot hear the conversation due to an echo, decrease the volume level for hands-free phoning. This may reduce the effects of the echo.
- With some mobile phones, even if you press the accept button on the mobile phone when a call comes in, hands-free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, the name that comes first alphabetically is displayed.
- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

### The received call history and the dialled number history

- Calls made or editing performed only on your mobile phone will not be reflected to the dialled number history or phone book in the navigation system.
- You cannot make a call to the entry of an unknown user (no phone number) in the received call history.
- If calls are made by operating your mobile phone, no history data will be recorded in the navigation system.

### About phone book transfers

- If there are more than 400 phone book entries on your mobile phone, all entries may not be able to be downloaded completely.
- With some mobile phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer items one by one from your mobile phone.
- Depending on the mobile phone, this navigation system may not display the phone book correctly. (Some characters may be garbled or first name and last name are in reverse order.)
- If the phone book in the mobile phone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the mobile phone.)
- Depending on the mobile phone, phone book transfer may not be available. ▣

## Updating the Bluetooth wireless technology software

Downloading the files of updating will be available in the future. You will be able to download the latest update from appropriate website by using your PC.

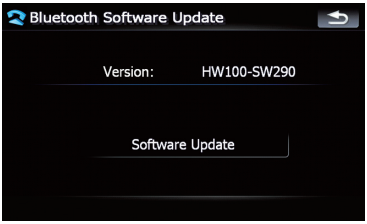
❒ Before you download the files and install the update, read through the instructions on the website. For the procedure before you display the screen used for updating, follow the instructions on the website.

**1 Touch [Phone Settings] on the “Phone Menu”.**

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 47.

**2 Touch [Bluetooth Software Update].**

The current version is displayed.


Bluetooth Software Update
Software Update

Version: HW100-SW290

**3 Touch [Software Update].**

Update starts. ◾

You can play a normal music CD using the built-in drive of the navigation system. This section describes these operations.

**1 Insert the disc you want to play into disc-loading slot.**

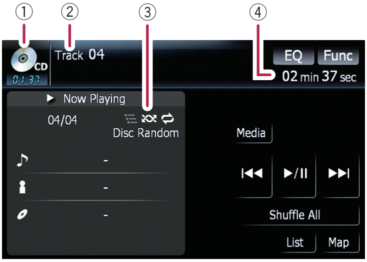
Playback starts from the first track of the CD.

**2 Touch [DISC] on the "AV Source" menu to display the "CD" screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**3 Use the touch panel keys on the screen to control the disc.**

## Reading the screen



① **Source icon**
Shows which source has been selected.

② **Track number indicator**
Shows the number of the track currently playing.

③ **Repeat/Random/Scan indicator**
The marks shown below indicate the current playback status.

🔁 **and repeat range:** Displays the current repeat range

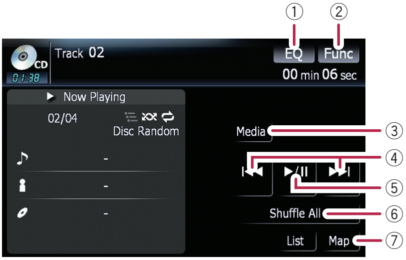
🔀: Random

☰: Scan

④ **Play time indicator**
Shows the elapsed playing time of the current track. ■

## Using the touch panel keys

**Touch panel keys**



① **Recalls equaliser curves**

➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the "Function" menu**

➲ For details, refer to *Using the "**Function**" menu* on the next page.

③ **Switching the playing part**

➲ For details, refer to ***Switching the playing part*** on page 62.

④ **Skipping the track forward or backward**
Touching [▶▶I] skips to the start of the next track. Touching [I◀◀] once skips to the start of the current track. Touching it again will skip to the previous track.

**Fast rewind or forward**
Keep touching [I◀◀] or [▶▶I] to perform fast rewind or forward.

❒ Fast rewind is cancelled when it reaches the beginning of the first track on the disc.

❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑤ **Playback and Pause**
Touching [▶/II] switches between "playback" and "pause".

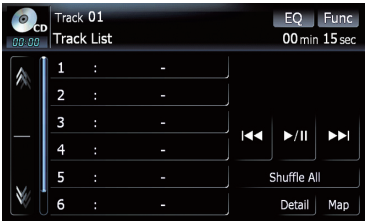
⑥ **Shuffle All**
All of the songs in the disc can be played at random by touching only one key.

❒ To cancel the random play, switch [**Random**] to [**Off**] on the "**Function**" menu.

⑦ **Displaying the map screen** ■

## Selecting a track from the list

The list lets you see the list of track titles, file names or folder names on a disc and select one of them to play.



**1 Touch [List].**

**2 To return to the previous screen, touch [Detail].**

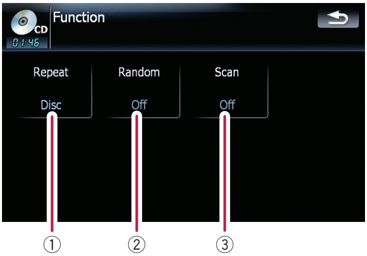
- ❒ Touching ⇈ or ⇊ switches the selection to the next or previous page in the list.
- ❒ The "–" mark is displayed if there is no corresponding information. ■

## Using the "Function" menu

**1 Touch [DISC] on the "AV Source" menu to display the "CD" screen.**

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**2 Touch [Func].**



Repeat Disc
Random Off
Scan Off

① **Repeating play**
Each touch of [**Repeat**] changes the settings as follows:

- **Disc** — Repeats the current disc
- **Track** — Repeats just the current track

❒ If you perform track search or fast forward/rewind, repeat play is automatically cancelled.

② **Play tracks in a random order**
Touching [**Random**] switches between [**On**] and [**Off**].

③ **Scan tracks of a CD**
Touching [**Scan**] switches between [**On**] and [**Off**]. Scan play lets you hear the first 10 seconds of each track on the CD. When you find the desired track touch [**Scan**] to turn scan play off.

❒ After the scanning of a CD is finished, normal playback of the tracks will begin again. ■

You can play an disc that contains compressed audio files using the built-in drive of the navigation system. This section describes these operations.

❒ In the following description, the MP3, WMA, AAC files are collectively referred to as “Compressed audio file”.

### 1 Insert the disc you want to play into disc-loading slot.

Playback starts from the first file of the ROM.

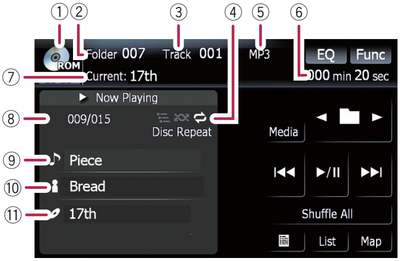
### 2 Touch [DISC] on the “AV Source” menu to display the “ROM” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

### 3 Use this ROM screen to play the disc.

➲ For details, refer to *Using the touch panel keys* on this page.

## Reading the screen


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
ROM
Folder 007
Track 001
MP3
EQ
Func
Current: 17th
000 min 20 sec
Now Playing
009/015
Disc Repeat
Media
Piece
Bread
17th
Shuffle All
List
Map

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**
Shows the folder number currently playing.

③ **Track indicator**
Shows the track number currently playing.

④ **Repeat/Random/Scan indicator**
The marks shown below indicate the current playback status.

🔁 **and repeat range:** Displays the current repeat range

🔀: Random

☰: Scan

⑤ **File type indicator**
Shows the type of audio file currently playing.

⑥ **Play time indicator**
Shows the elapsed playing time of the current track.

⑦ **Folder name indicator**
Shows the folder name currently playing.

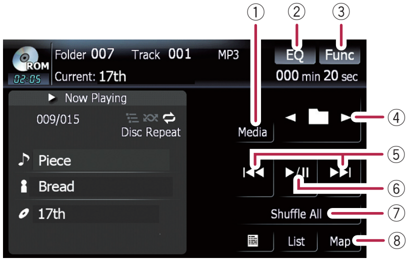
⑧ **Song number indicator**
Shows the number of the song playing in the selected list.

⑨ **Song title indicator**
Shows the title of the current song.

⑩ **Artist name indicator**
Shows the artist name of the current song.

⑪ **Album title indicator**
Shows the title of the album for the current song. ■

## Using the touch panel keys


①
②
③
④
⑤
⑥
⑦
⑧
ROM
02:05
Folder 007
Track 001
MP3
EQ
Func
Current: 17th
000 min 20 sec
Now Playing
009/015
Disc Repeat
Media
Piece
Bread
17th
Shuffle All
List
Map

① **Switching the playing part**
When playing a disc containing a mixture of various media file types such, you can switch between media files types to play.
Touch [**Media**] repeatedly to switch between the following media file types:
**CD** (audio data (CD-DA)) — **ROM** (compressed audio file) — **DivX** (DivX video files)

❒ This touch panel key appears only when playing a disc containing a mixture of various media file types.

② **Recalls equaliser curves**

➲ For details, refer to *Recalling equaliser curves* on page 125.

③ **Displaying the “Function” menu**

- ➲ For details, refer to *Using the “***Function***” menu* on the next page.

④ **Select the previous or next folder**

❒ Touching these keys enables you to select the previous or next folder and playback the first track on the folder. You cannot select a folder that does not have a compressed audio file.

⑤ **Skipping the track forward or backward**

Touching [►►I] skips to the start of the next track. Touching [I◄◄] once skips to the start of the current track. Touching it again will skip to the previous track.

**Fast rewind or forward**

Keep touching [I◄◄] or [►►I] to perform fast rewind or forward.

❒ Fast rewind is cancelled when it reaches the beginning of the first file on the repeat range.

❒ In the case of compressed audio files, there is no sound on fast rewind or forward.

❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑥ **Playback and Pause**

Touching [►/II] switches between “playback” and “pause”.

⑦ **Shuffle All**

All of the songs in the disc can be played at random by touching only one key.

❒ If the disc contains a mixture of various media file types, all tracks within the current part (“CD” or “ROM”) are played randomly.

❒ To cancel the random play, switch [**Random**] to [**Off**] on the “**Function**” menu.

⑧ **Displaying the map screen**

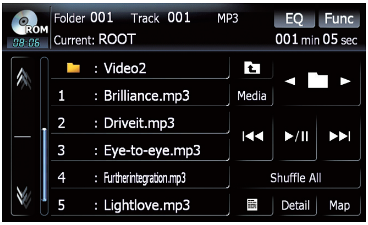
## Selecting a track from the list

The list lets you see the list of track titles or folder names on a disc. If you touch a folder on the list, you can view its contents. You can play a track on the list by touching it.

### 1 Touch [List].

The list of track titles and folder names appears.

### 2 Touch your desired folder or track on the list.



Touching ▲ or ▼ switches the selection to the next or previous page in the list.

Touching ↰ displays the content of the upper folder (parent folder). If the uppermost folder is listed, ↰ cannot be used.

❒ If the selected folder does not contain any playable track, the track list is not displayed.

## Browsing embedded text information

Text information recorded in a compressed audio file disc can be displayed.

### ● Touch ▤.

The next piece of information is displayed.

- **Album Title :** (album title)
- **Track Title :** (track title)
- **Folder Title :** (folder title)
- **File Name :** (file name)
- **Artist Name :** (artist name)

If specific information has not been recorded on compressed audio files on disc, nothing may be displayed.

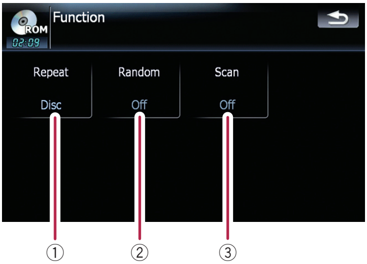
❒ If you do not operate functions within about 30 seconds, the display automatically returns to the ordinary display. ▣

## Using the "Function" menu

### 1 Touch [DISC] on the "AV Source" menu to display the "ROM" screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

### 2 Touch [Func].



① **Repeating play**
Each touch of [**Repeat**] changes the settings as follows:

- **Folder** — Repeats the current folder
- **Disc** — Repeats all compressed audio files
- **Track** — Repeats just the current track

❒ If you select another folder during repeat play, the repeat play range changes to [**Disc**].

❒ If you perform fast forward/rewind during [**Track**], the repeat play range changes to [**Folder**].

❒ When [**Folder**] is selected, it is not possible to play back a subfolder of that folder.

❒ When playing discs with compressed audio files and audio data (CD-DA), repeat play is performed within the currently playing data session even if [**Disc**] is selected.

② **Play tracks in a random order**
Touching [**Random**] switches between [**On**] and [**Off**]. When using **ROM**, the tracks in the current repeat play range are randomly played.

❒ If you turn [**Random**] to [**On**] when the repeat play range is set to [**Track**], the repeat play range changes to [**Folder**] automatically.

③ **Scan folders and tracks**
Scan play lets you hear the first 10 seconds of each track. Scan play is performed in the current repeat play range.
Touching [**Scan**] switches between [**On**] and [**Off**]. When you find the desired track touch [**Scan**] to turn scan play off.

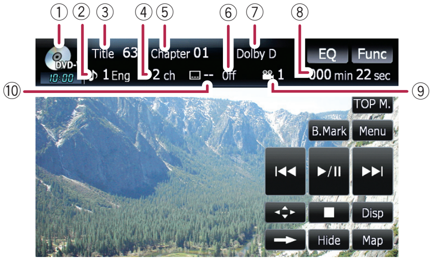
❒ After completion of track or folder scanning, normal playback of the tracks will begin again.

❒ If you turn [**Random**] to [**On**] when the repeat play range is set to [**Track**], the repeat play range changes to [**Folder**] automatically.

❒ If you turn [**Scan**] to [**On**] while the repeat play range is set to [**Disc**], scan play is performed for only the first tracks of each folder. ■

You can play a DVD-Video using the built-in drive of the navigation system. This section describes operations for playing a DVD-Video.

## Reading the screen


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
DVD-V
10:00
Title 63
Chapter 01
Dolby D
EQ
Func
1 Eng
2 ch
-- Off
1
000 min 22 sec
TOP M.
B.Mark
Menu
Disp
Hide
Map

① **Source icon**
Shows which source has been selected.

② **Audio track indicator**
Shows the audio track number and audio language currently selected.

③ **Title number indicator**
Shows the title number currently playing.

④ **Audio channel indicator**
Shows the current audio channel type, such as “Mch” (Multi-channel).

⑤ **Chapter number indicator**
Shows the chapter currently playing.

⑥ **Subtitle language indicator**
Shows the subtitle language currently selected.

⑦ **Digital sound format indicator**
Shows the digital sound format (surround sound format) has been selected.

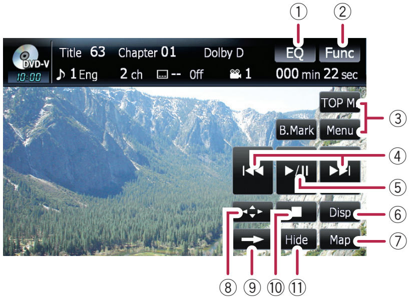
⑧ **Play time indicator**
Shows the elapsed playing time of the current title.

⑨ **Viewing angle indicator**
Shows what viewing angle has been selected.

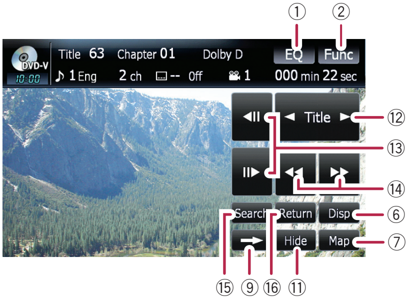
⑩ **Subtitle number indicator**
Shows the subtitle number currently selected. ■

## Using the touch panel keys

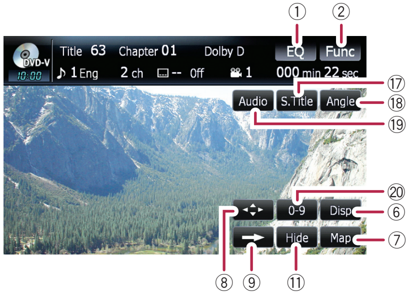
### Playback screen (page1)


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
DVD-V
10:00
Title 63
Chapter 01
Dolby D
EQ
Func
1 Eng
2 ch
-- Off
1
000 min 22 sec
TOP M.
B.Mark
Menu
Disp
Hide
Map

### Playback screen (page2)


①
②
⑫
⑬
⑭
⑥
⑦
⑮
⑨
⑯
⑪
DVD-V
10:00
Title 63
Chapter 01
Dolby D
EQ
Func
1 Eng
2 ch
-- Off
1
000 min 22 sec
Title
Search
Return
Disp
Hide
Map

### Playback screen (page3)


①
②
⑰
⑱
⑲
⑳
⑥
⑦
⑧
⑨
⑪
DVD-V
10:00
Title 63
Chapter 01
Dolby D
EQ
Func
1 Eng
2 ch
-- Off
1
000 min 22 sec
Audio
S.Title
Angle
0-9
Disp
Hide
Map

❒ With some discs, the icon ⊘ may be displayed, meaning that the operation is not valid.

① **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the “Function” menu**

➲ For details, refer to *Using the “***Function***” menu* on page 68.

③ **Display the DVD menu**
You can display the menu by touching [**Menu**] or [**TOP M.**] while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

④ **Skip forward or backward**
Touching [▶▶|] skips to the start of the next chapter. Touching [|◀◀] once skips to the start of the current chapter. Touching it again will skip to the previous chapter.

❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑤ **Playback and Pause**
Touching [▶/II] switches between “playback” and “pause”.

⑥ **Switch the display**
Touching [**Disp**] changes the indication on the information plate as follows:
Disc information display — Repeat range and L/R select display

⑦ **Displaying the map screen**

⑧ **Display the DVD menu keypad**

➲ For details, refer to *Using DVD menu by touch panel keys* on page 68.

⑨ **Switch next page of touch panel keys**

⑩ **Stop playback**

⑪ **Hides the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑫ **Skip the title forward or backward**
Touching [▶] skips to the start of the next title. Touching [◀] skips to the start of the previous title.

⑬ **Frame-by-frame playback (or slow-motion playback)**

➲ For details, refer to *Frame-by-frame playback* on page 68.

➲ For details, refer to *Slow motion playback* on page 68.

⑭ **Fast reverse or forward**
Touching [◀◀] or [▶▶] to perform fast reverse or forward.
If you keep touching [◀◀] or [▶▶] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [▶/II], [◀◀] or [▶▶].

⑮ **Specify the chapter you want to play back or the time to start playback by entering a number**

❒ For details, refer to *Searching for a desired scene and starting playback from a specified time* on the next page.

⑯ **Perform the operation (such as resuming) stored in the disc**
When using a DVD that has a point recorded that indicates where to return to, the DVD returns to the specified point and begins play back from that point.

⑰ **Change the subtitle language (Multi-subtitle)**
Each touch of [**S.Title**] switches between the subtitle languages.

⑱ **Change the viewing angle (Multi-angle)**
Each touch of [**Angle**] switches between viewing angles.

❒ During playback of a scene shot from multiple angles, the angle icon is displayed. Turn the angle icon display on or off using the “**DVD Setup**” menu.

➲ For details, refer to *Setting the angle icon display* on page 78.

⑲ **Change audio language and audio systems (Multi-audio)**
Each touch of [**Audio**] switches between audio language and audio system.

❒ DTS audio cannot be output, so select an audio setting other than DTS.

❒ Display indications such as MPEG-A and Mch indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.

⑳ **Entering the numerical commands**

➲ For details, refer to *Direct number search* on the next page.

## Resuming playback (Bookmark)

The Bookmark function lets you resume playback from a selected scene the next time the disc is loaded.

**Touching [B.Mark]:**

You can bookmark a point for every five discs. If you try to memorise a point for the same disc, the oldest bookmark will be overwritten by the newest one.

❐ To clear the bookmark on a disc, keep touching [**B.Mark**] during playback.

**Press and hold down EJECT button:**

You can also bookmark a point for one disc by pressing and holding down **EJECT** button. The next time you load the same disc, playback will resume from the bookmarked point. When you newly bookmark a point with this method, any previously bookmarked point(s) will be overwritten.

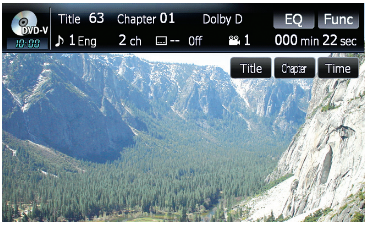
❐ For playback, the point bookmarked with this method is given priority over the point bookmarked by using [**B.Mark**].

## Searching for a desired scene and starting playback from a specified time

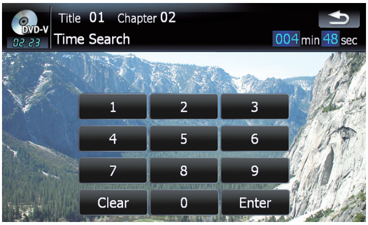
You can search for a desired scene by specifying a title or a chapter, and the time.

❐ Chapter search and time search are not possible when disc playback has been stopped.

**1 Touch [Search] and then touch [Title] (title), [Chapter] (chapter), [Time] (time).**



**2 Touch the keys to input the desired number or time and then touch [Enter].**



**For titles, chapters**

- To select 3, touch [**3**] and [**Enter**] in order.
- To select 10, touch [**1**] and [**0**] and [**Enter**] in order.

**For time (time search)**

- To select 5 minutes 03 seconds, touch [**5**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**0**], [**0**] and [**Enter**] in order.

❐ To cancel the input numbers, touch [**Clear**].

## Direct number search

You can use this function when you need to enter a numerical command during DVD playback.

**1 Touch [0-9].**

**2 Touch [0] to [9] to input the desired number.**

**3 While the input number is displayed, touch [Enter].**

## Operating the DVD menu

You can operate the DVD menu by touching the menu item on the screen directly.

❐ Depending on the contents of DVD discs, this function may not work properly. In this case, use touch panel keys to operate the DVD menu.

**1 Touch the screen to display the touch panel keys.**

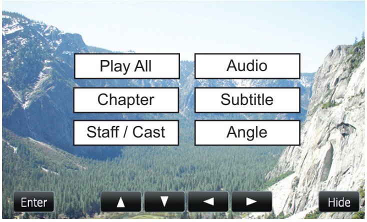
**2 Touch [TOP M.] or [Menu] to display touch panel keys to operate the DVD menu.**

**3 Touch the desired menu item.**

## Using DVD menu by touch panel keys

If items on the DVD menu appears at the bottom of the screen, the touch panel keys may overlay them. In such case, select a item using those touch panel keys.

**1 Touch [▲], [▼], [◀] or [▶] to select the desired menu item.**



- ❐ If the touch panel keys for DVD menu selection disappears, touching anywhere and touching ✥ displays them again.

**2 Touch [Enter].**

Playback starts from the selected menu item. The way to display the menu differs depending on the disc.

## Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

- **Touch [II▶] during playback.**

Each time you touch [II▶], you move ahead one frame.

To return to normal playback, touch [▶/II].

- ❐ With some discs, images may be unclear during frame-by-frame playback.

## Slow motion playback

This lets you slow down playback speed.

**1 Keep touching [II▶] until II▶ is displayed during playback.**

The icon II▶ is displayed, forward slow motion playback begins.

- ❐ To return to normal playback, touch [▶/II].

**2 Touch [◀II] or [II▶] to adjust playback speed during slow motion playback.**

Each time you touch [◀II] or [II▶] it changes the speed in four steps in the following order:

**1/16 ↔ 1/8 ↔ 1/4 ↔ 1/2**

- ❐ There is no sound during slow motion playback.
- ❐ With some discs, images may be unclear during slow motion playback.
- ❐ Reversing slow motion playback is not possible. ■

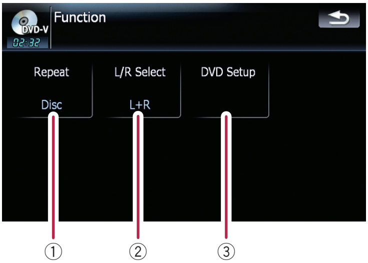
# Using the “Function” menu

**1 Touch [DISC] on the “AV Source” menu to display the “DVD-V” screen.**

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**2 Touch the screen to display the touch panel keys.**

**3 Touch [Func].**



① **Repeating play**

Each touch of [**Repeat**] changes the settings as follows:

- **Title** — Repeats just the current title
- **Chapter** — Repeats just the current chapter
- **Disc** — Plays throughout the current disc

❒ If you perform chapter (title) search, fast forward/rewind or slow motion playback, the repeat play range changes to [**Disc**].

② **Selecting audio output**

When playing DVDs recorded with LPCM audio, you can switch the audio output.

Touch [**L/R Select**] repeatedly until the desired audio output appears in the display.

Each touch of [**Repeat**] changes the settings as follows:

- **L+R** — Left and right
- **L** — Left
- **R** — Right
- **L/R** — Mixing left and right

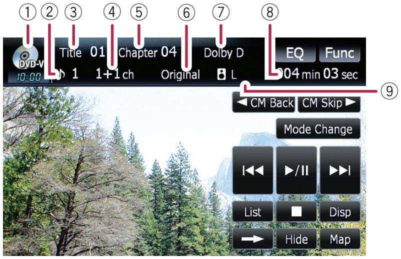
❒ This function is not available when disc playback has been stopped.

③ **DVD setup adjustments**

➲ For details, refer to *Displaying* **DVD Setup** *menu* on page 77. ■

You can play a DVD-VR (DVD Video Recording Format) using the built-in drive of the navigation system. This section describes operations for DVD-VR.

## Reading the screen


①
②
③
④
⑤
⑥
⑦
⑧
⑨
DVD-VR
10:00
Title 01
Chapter 04
Dolby D
EQ
Func
♪ 1
1+1ch
Original
L
004 min 03 sec
◄ CM Back
CM Skip ►
Mode Change
List
Disp
Hide
Map

① **Source icon**
Shows which source has been selected.

② **Audio track indicator**
Shows the audio track number currently selected.

③ **Title number indicator**
Shows the title number currently playing.

④ **Audio channel indicator**
Shows the current audio channel type, such as “Mch” (Multi-channel).

⑤ **Chapter number indicator**
Shows the chapter currently playing.

⑥ **Play mode indicator**
Shows the current play mode.
➲ For details, refer to ***Switching the playback mode*** on page 72.

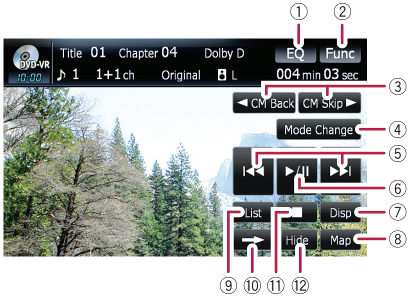
⑦ **Digital sound format indicator**
Shows the digital sound format (surround sound format) has been selected.

⑧ **Play time indicator**
Shows the elapsed playing time of the current title.

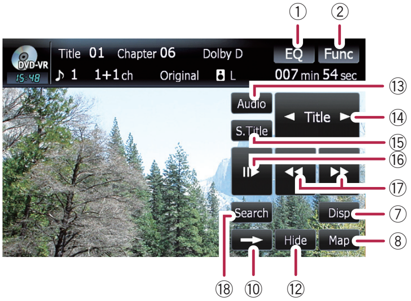
⑨ **Mixing condition indicator**
Shows the current mixing condition. ■

## Using the touch panel keys

**Playback screen (page1)**


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
DVD-VR
10:00
Title 01
Chapter 04
Dolby D
EQ
Func
♪ 1
1+1ch
Original
L
004 min 03 sec
◄ CM Back
CM Skip ►
Mode Change
List
Disp
Hide
Map

**Playback screen (page2)**


①
②
⑬
⑭
⑮
⑯
⑰
⑦
⑧
⑱
⑩
⑫
DVD-VR
15:48
Title 01
Chapter 06
Dolby D
EQ
Func
♪ 1
1+1ch
Original
L
007 min 54 sec
Audio
◄ Title ►
S.Title
Search
Disp
Hide
Map

❒ With some discs, the icon ⊘ may be displayed, meaning that the operation is not valid.

① **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the “Function” menu**
➲ For details, refer to *Using the “**Function**” menu* on page 73.

③ **◄ CM Back/CM Skip ►**
➲ For details, refer to ***Using the short-time skip function*** on page 72.

④ **Switching the playback mode**
➲ For details, refer to ***Switching the playback mode*** on page 72.

⑤ **Skip forward or backward**
Touching [►►I] skips to the start of the next chapter. Touching [I◄◄] once skips to the start of the current chapter. Touching it again will skip to the previous chapter.

- ❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑥ **Playback and Pause**
Touching [▶/❚❚] switches between “playback” and “pause”.

⑦ **Switch the display**
Touching [**Disp**] changes the information as follows:
Disc information display — Repeat range display

⑧ **Displaying the map screen**

⑨ **Display the title list**
Displays the title list recorded on the disc.

⑩ **Switch next page of touch panel keys**

⑪ **Stop playback**

⑫ **Hides the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑬ **Change audio language and audio systems (Multi-audio)**
Each touch of [**Audio**] switches between audio language and audio system.

- ❒ Display indications such as MPEG-A and Mch indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.

⑭ **Skip the title forward or backward**
Touching [▶] skips to the start of the next title.
Touching [◀] skips to the start of the previous title.

⑮ **Change the subtitle language (Multi-subtitle)**
Each touch of [**S.Title**] switches between the subtitle languages.

⑯ **Frame-by-frame playback (or slow-motion playback)**

- ➲ For details, refer to *Frame-by-frame playback* on the next page.
- ➲ For details, refer to *Slow motion playback* on the next page.

⑰ **Fast reverse or forward**
Touching [◀◀] or [▶▶] to perform fast reverse or forward.
If you keep touching [◀◀] or [▶▶] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [▶/❚❚], [◀◀] or [▶▶].

⑱ **Specify the chapter you want to play back or the time to start playback by entering a number**

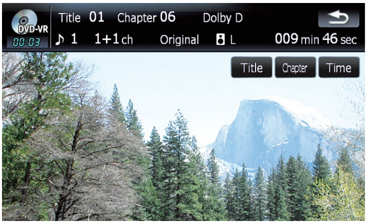
- ➲ For details, refer to *Searching for a desired scene and starting playback from a specified time* on this page.

## Searching for a desired scene and starting playback from a specified time

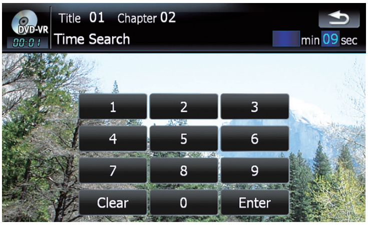
You can search for a desired scene by specifying a title or a chapter, and the time.

- ❒ Chapter search and time search are not possible when disc playback has been stopped.

### 1 Touch [Search] and then touch [Title] (title), [Chapter] (chapter), [Time] (time).



### 2 Touch the keys to input the desired number or time and then touch [Enter].



#### For titles, chapters

- To select 3, touch [**3**] and [**Enter**] in order.

- To select 10, touch [**1**] and [**0**] and [**Enter**] in order.

**For time (time search)**

- To select 5 minutes 03 seconds, touch [**5**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**0**], [**0**] and [**Enter**] in order.

❒ To cancel the input numbers, touch [**Clear**].

## Switching the playback mode

You have two methods for playing DVD-VR discs; **Original** (original) and **Playlist** (playlist).

❒ Titles created with DVD recorders are called original. Those based on original, rearranged titles are called playlist. Playlists are created on DVD-R/-RW discs.

● **Touch [Mode Change] to switch the play mode.**

If the play mode is changed, playback starts from the beginning of the selected play mode.

## Using the short-time skip function

This function enables you to skip over your specified interval on the video playback. This is useful to skip commercials on your recorded DVD-VR disc.

● **To skip progressively backward or forward, touch [◄ CM Back] or [CM Skip ►].**

Each touch of [**◄ CM Back**] or [**CM Skip ►**] changes steps in the following order:

**◄ CM Back**

5 sec. — 15 sec. — 30 sec. — 1 min. — 2 min. — 3 min. — 0 sec.

**CM Skip ►**

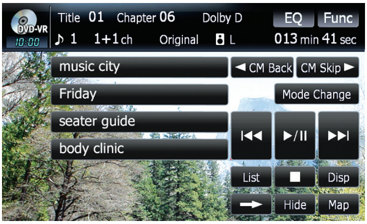
30 sec. — 1 min. — 1.5 min. — 2 min. — 3 min. — 5 min. — 10 min. — 0 sec.

## Playing by selecting from the title list

You can select and play a desired title from the list.

**1 Touch [List] on the playback screen.**

**2 Touch the title to play from the list.**



❒ Touching ▲ or ▼ switches the selection to the next or previous page in the list.

**3 To return to the previous screen, touch [List].**

## Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

● **Touch [II►] during playback.**

Each time you touch [II►], you move ahead one frame.

To return to normal playback, touch [►/II].

❒ With some discs, images may be unclear during frame-by-frame playback.

## Slow motion playback

This lets you slow down playback speed.

**1 Keep touching [II►] until II► is displayed during playback.**

The icon II► is displayed, forward slow motion playback begins.

❒ To return to normal playback, touch [►►] or [◄◄], etc.

**2 Touch [II►] to adjust playback speed during slow motion playback.**

Each touch of [II►] changes the speed in four steps as below:

**1/16 → 1/8 → 1/4 → 1/2**

❒ There is no sound during slow motion playback.

❒ With some discs, images may be unclear during slow motion playback.

❒ Reversing slow motion playback is not possible. ◼

## Using the “Function” menu

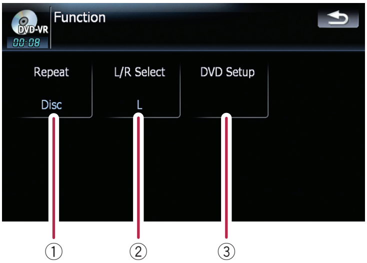
### 1 Touch [DISC] on the “AV Source” menu to display the “DVD-VR” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

### 2 Touch the screen to display the touch panel keys.

### 3 Touch [Func].

**Function** menu



① **Repeating play**

Each touch of [**Repeat**] changes the settings as follows:

- **Title** — Repeats just the current title
- **Chapter** — Repeats just the current chapter
- **Disc** — Plays throughout the current disc

❒ If you perform chapter (title) search, fast forward/rewind or slow motion playback, the repeat play range changes to [**Disc**].

② **Selecting audio output**

When playing DVDs recorded with LPCM audio, you can switch the audio output. Touch [**L/R Select**] repeatedly until the desired audio output appears in the display.

- **L+R** — Left and right
- **L** — Left
- **R** — Right
- **L/R** — Mixing left and right

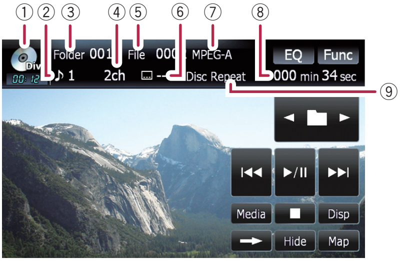
❒ This function is not available when disc playback has been stopped.

③ **DVD setup adjustments**

➲ For details, refer to *Displaying* **DVD Setup** *menu* on page 77. ◼

You can play a DivX using the built-in drive of the navigation system. This section describes that operations.

## Reading the screen


①
②
③
④
⑤
⑥
⑦
⑧
⑨
Folder 001
File 0002
MPEG-A
EQ
Func
♪ 1
2ch
Disc Repeat
000 min 34 sec
Media
Disp
Hide
Map

① **Source icon**
Shows which source has been selected.

② **Audio track indicator**
Shows the audio track number currently selected.

③ **Folder number indicator**
Shows the folder number currently playing.

④ **Audio channel indicator**
Shows the current audio channel type, such as “Mch” (Multi-channel).

⑤ **File number indicator**
Shows the file number currently playing.

⑥ **Subtitle number indicator**
Shows the subtitle number currently selected.

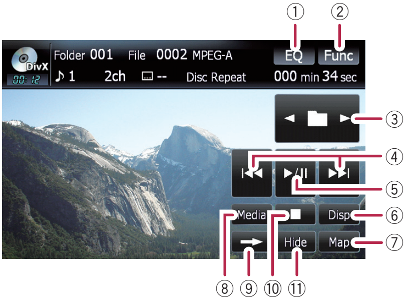
⑦ **Digital sound format indicator**
Shows the digital sound format (surround sound format) currently selected.

⑧ **Play time indicator**
Shows the elapsed playing time of the current title.

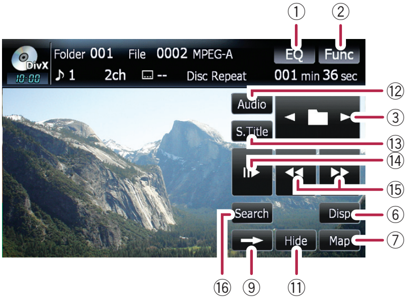
⑨ **Repeat range indicator**
Shows which repeat range has been selected. ■

## Using the touch panel keys

**Playback screen (page1)**


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
Folder 001
File 0002
MPEG-A
EQ
Func
♪ 1
2ch
Disc Repeat
000 min 34 sec
Media
Disp
Hide
Map

**Playback screen (page2)**


①
②
⑫
③
⑬
⑭
⑮
⑥
⑦
⑯
⑨
⑪
Folder 001
File 0002
MPEG-A
EQ
Func
♪ 1
2ch
Disc Repeat
001 min 36 sec
Audio
S.Title
Search
Disp
Hide
Map

❐ With some discs, the icon ⊘ may be displayed, meaning that the operation is not valid.

① **Recalls equaliser curves**

➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the “Function” menu**

➲ For details, refer to *Using the “***Function***” menu* on page 76.

③ **Select the previous or next folder**
Touch [◀] or [▶] to select the desired folder.

④ **Skip forward or backward**
Touching [▶▶I] skips to the start of the next file. Touching [I◀◀] once skips to the start of the current file. Touching again will skip to the previous file.

❐ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑤ **Playback and Pause**

Touching [▶/II] switches between “playback” and “pause”.

⑥ **Switch the information**
Touching [**Disp**] changes the indication on the information plate as follows:
Disc information display — Current folder display — File name display

⑦ **Displaying the map screen**

⑧ **Switching the playing part**
When playing a disc containing a mixture of various media file types such, you can switch between media files types to play.
Touch [**Media**] repeatedly to switch between the following media file types:
**CD** (audio data (CD-DA)) — **ROM** (compressed audio file) — **DivX** (DivX video files)
❒ This touch panel key appears only when playing a disc containing a mixture of various media file types.

⑨ **Switch next page of touch panel keys**

⑩ **Stop playback**

⑪ **Hides the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑫ **Change audio language and audio systems (Multi-audio)**
Each touch of [**Audio**] switches between audio language and audio system.

⑬ **Change the subtitle language (Multi-subtitle)**
Each touch of [**S.Title**] switches between the subtitle languages.

⑭ **Frame-by-frame playback (or slow-motion playback)**
➲ For details, refer to *Frame-by-frame playback* on this page.
➲ For details, refer to *Slow motion playback* on this page.

⑮ **Fast reverse or forward**
Touching [◀◀] or [▶▶] to perform fast reverse or forward.
If you keep touching [◀◀] or [▶▶] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [▶/II], [◀◀] or [▶▶].

⑯ **Specify the chapter you want to play back or the time to start playback by entering a number**
➲ For details, refer to *Searching for a desired scene and starting playback from a specified time* on this page.

## Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

- **Touch [II▶] during playback.**

Each time you touch [II▶], you move ahead one frame.
To return to normal playback, touch [▶/II].
❒ With some discs, images may be unclear during frame-by-frame playback.

## Slow motion playback

This lets you slow down playback speed.

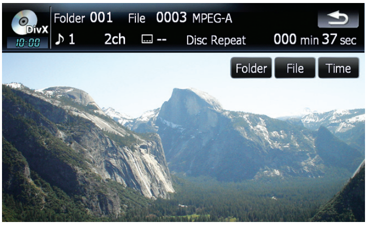
- **Keep touching [II▶] until II▸ is displayed during playback.**

The icon II▸ is displayed, forward slow motion playback begins.
❒ To return to normal playback, touch [▶▶] or [◀◀], etc.
❒ There is no sound during slow motion playback.
❒ With some discs, images may be unclear during slow motion playback.
❒ Reversing slow motion playback is not possible.

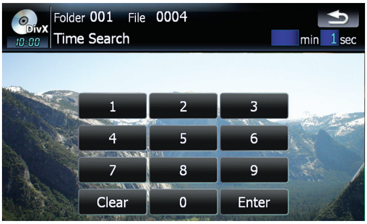
## Searching for a desired scene and starting playback from a specified time

You can search for a desired scene by specifying a folder or a file, and the time.
❒ Chapter search and time search are not possible when disc playback has been stopped.

### 1 Touch [Search] and then touch [Folder] (folder), [File] (file), [Time] (time).


DivX
10:00
Folder 001 File 0003 MPEG-A
♪ 1 2ch -- Disc Repeat 000 min 37 sec
Folder
File
Time

### 2 Touch the keys to input the desired number or time and then touch [Enter].


DivX
10:00
Folder 001 File 0004
Time Search
min 1 sec
1
2
3
4
5
6
7
8
9
Clear
0
Enter

**For folders, files**

- To select 3, touch [**3**] and [**Enter**] in order.
- To select 10, touch [**1**] and [**0**] and [**Enter**] in order.

**For time (time search)**

- To select 5 minutes 03 seconds, touch [**5**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**0**], [**0**] and [**Enter**] in order.

❒ To cancel the input numbers, touch [**Clear**]. ■

## Using the "Function" menu

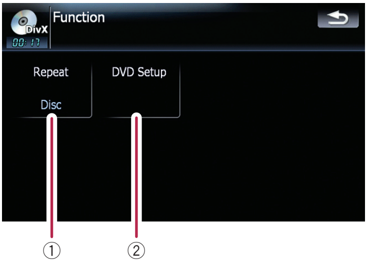
### 1 Touch [DISC] on the "AV Source" menu to display the "DivX" screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

### 2 Touch the screen to display the touch panel keys.

### 3 Touch [Func].

**Function** menu


DivX
00: 17
Function
Repeat
Disc
DVD Setup
①
②

① **Repeating play**
Each touch of [**Repeat**] changes the settings as follows:

- **File** — Repeat just the current file
- **Folder** — Repeat just the current folder
- **Disc** — Plays throughout the current disc

❒ If you perform folder (file) search, fast forward/rewind or slow motion playback, the repeat play range changes to [**Disc**].

② **DVD setup adjustments**
➲ For details, refer to *Displaying* **DVD Setup** *menu* on the next page. ■

Configure the DVD-Video/DVD-VR/DivX player.

## Displaying DVD Setup menu

**1 Play the disc that contains DVD-Video, DVD-VR or DivX.**

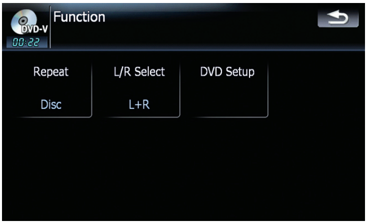
**2 Touch [DISC] on the “AV Source” menu to display the normal playback screen.**

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**3 Touch [Func].**

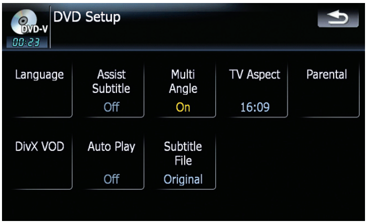
The“ **Function**” menu appears.

**4 Touch [DVD Setup].**



Repeat: Disc
L/R Select: L+R

**5 Touch the desired function.**



Assist Subtitle: Off
Multi Angle: On
TV Aspect: 16:09
Auto Play: Off
Subtitle File: Original

■

## Setting the top-priority languages

You can assign the top-priority language to the top-priority subtitle, audio and menu in initial playback. If the selected language is recorded on the disc, subtitles, audio and menu are displayed or output in that language.

**1 Touch [DVD Setup] on the “Function” menu.**

- ➲ For details, refer to *Displaying* **DVD Setup** *menu* on this page.

**2 Touch [Language].**

You can select the language preference of the subtitle, audio, and menus.

**3 Touch the key next to [Subtitle Language], [Audio Language] or [Menu Language].**

Each language menu is displayed and the currently set language is selected.

**4 Touch the desired language.**

When you select [**Others**], a language code input display is shown. Input the four digit code of the desired language then touch [**Enter**].

- ➲ Refer to *Language code chart for DVDs* on page 81.
- ❒ If the selected language is not recorded on the disc, the default language specified on the disc is output and displayed.
- ❒ You can also switch the subtitle and audio language by touching [**S.Title**] or [**Audio**] during playback.
- ❒ Even if you use [**S.Title**] or [**Audio**] to switch the subtitle or audio language, this does not affect the settings here. ■

## Setting assist subtitles on or off

Assist subtitles offer explanations for the aurally impaired. However, they are only displayed if they are recorded on the DVD.
You can turn assist subtitles on or off as desired.

**1 Touch [DVD Setup] on the “Function” menu.**

- ➲ For details, refer to *Displaying* **DVD Setup** *menu* on this page.

**2 Touch [Assist Subtitle].**

Touching [**Assist Subtitle**] switches between [**On**] and [**Off**]. ■

## Setting the angle icon display

You can set the angle icon to display in scenes where the angle can be switched.

**1 Touch [DVD Setup] on the “Function” menu.**

- ➲ For details, refer to *Displaying* **DVD Setup** *menu* on the previous page.

**2 Touch [Multi Angle].**

Touching [**Multi Angle**] switches between [**On**] and [**Off**]. ■

## Setting the aspect ratio

There are two kinds of displays. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use a regular rear display with a TV aspect of 4:3, you can set the aspect ratio suitable for your rear display. (We recommend use of this function only when you want to fit it to the rear display.)

- ❐ When using a regular display, select either “**Letter Box**” or “**Panscan**”. Selecting “**16:09**” may result in an unnatural picture.

**1 Touch [DVD Setup] on the “Function” menu.**

- ➲ For details, refer to *Displaying* **DVD Setup** *menu* on the previous page.

**2 Touch [TV Aspect].**

Each touch of [**TV Aspect**] changes the settings as follows:

- **16:09** — Wide screen picture (16:9) is displayed as it is (initial setting)
- **Letter Box** — The picture is in the shape of a letter box with black bands at the top and bottom of the screen
- **Panscan** — The picture is cut short at the right and left of the screen
- ❐ When playing discs that do not have a panscan system, the disc is played back with [**Letter Box**] even if you select [**Panscan**] setting. Confirm whether the disc package bears the 16 : 9 LB mark.
- ❐ Some discs do not enable changing of the TV aspect. For details, refer to the disc’s instructions. ■

## Setting the parental lock

Some DVD-Video discs let you use parental lock to set restrictions so that children cannot watch violent or adult oriented scenes. You can set the parental lock level in steps as desired.

- ❐ When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

### Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, parental lock will not operate.

**1 Touch [DVD Setup] on the “Function” menu.**

- ➲ For details, refer to *Displaying* **DVD Setup** *menu* on the previous page.

**2 Touch [Parental].**

**3 Touch the key next to “Parental”.**

**4 Touch [0] to [9] to input a four digit code number.**

**5 While the input number is displayed, touch [Enter].**

The code number is registered, and you can now set the level.

**6 Touch any of [1] to [8] to select the desired level.**

The parental lock level is set.

- **Level 8** — Playback of the entire disc is possible (initial setting)
- **Level 7** to **Level 2** — Playback of discs for children and non-adult oriented discs is possible

- **Level 1** — Only playback of discs for children is possible

❒ If you want to change the parental level already set, enter the registered code number and then select the parental level.

❒ We recommend that you keep a record of your code number in case you forget it.

❒ The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. With discs that do not feature a recorded parental lock level, you cannot use parental lock.

❒ With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

❒ If you forget the registered code number, touch [**Clear**] 10 times on the number input screen. The registered code number is cancelled, letting you register a new one. ■

## Displaying your DivX® VOD registration code

In order to play DivX VOD (video on demand) content on this navigation system, you first need to register the unit with your DivX VOD content provider. You do this by generating a DivX VOD registration code, which you submit to your provider.

### 1 Touch [DVD Setup] on the "Function" menu.

➲ For details, refer to *Displaying* **DVD Setup** *menu* on page 77.

### 2 Touch [DivX VOD].

Your 8-digit registration code is displayed.

❒ Make a note of the code as you will need it when you register with a DivX VOD provider. ■

## Setting "Auto Play"

When a DVD disc with DVD menu is inserted, this unit will cancel the DVD menu automatically and start playback from the first chapter of the first title.

❒ This function is available for DVD-Video.

❒ Some DVDs may not operate properly. If this function is not fully operable, turn this function off and start playback.

### 1 Touch [DVD Setup] on the "Function" menu.

➲ For details, refer to *Displaying* **DVD Setup** *menu* on page 77.

### 2 Touch [Auto Play].

Touching [**Auto Play**] switches this setting between [**On**] and [**Off**].

❒ When [**Auto Play**] is [**On**], repeat play cannot be used. ■

## Setting the subtitle file for DivX®

You can select whether to display DivX external subtitles or not.

❒ If no DivX external subtitle files exist, the original DivX subtitles are displayed even when [**Custom**] is selected.

### 1 Touch [DVD Setup] on the “Function” menu.

➲ For details, refer to *Displaying* **DVD Setup** *menu* on page 77.

### 2 Touch [Subtitle File].

Touching [**Subtitle File**] switches this setting between [**Original**] and [**Custom**].

❒ Up to 42 characters can be displayed on one line. If more than 42 characters are set, the line breaks and the characters are displayed on the next line.

❒ Up to 126 characters can be displayed on one screen. If more than 126 characters are set, the excess characters will not be displayed.

❒ The DivX subtitles will be displayed even when the subtitle file setting is on if no corresponding subtitle files exist.

❒ Up to three lines can be displayed at once. ■

## Language code chart for DVDs

| Language (code), input code |
|---|
| Japanese (ja), 1001 |
| English (en), 0514 |
| French (fr), 0618 |
| Spanish (es), 0519 |
| German (de), 0405 |
| Italian (it), 0920 |
| Chinese (zh), 2608 |
| Dutch (nl), 1412 |
| Portuguese (pt), 1620 |
| Swedish (sv), 1922 |
| Russian (ru), 1821 |
| Korean (ko), 1115 |
| Greek (el), 0512 |
| Afar (aa), 0101 |
| Abkhazian (ab), 0102 |
| Afrikaans (af), 0106 |
| Amharic (am), 0113 |
| Arabic (ar), 0118 |
| Assamese (as), 0119 |
| Aymara (ay), 0125 |
| Azerbaijani (az), 0126 |
| Bashkir (ba), 0201 |
| Belorussian (be), 0205 |
| Bulgarian (bg), 0207 |
| Bihari (bh), 0208 |
| Bislama (bi), 0209 |
| Bengali, Bangla (bn), 0214 |
| Tibetan (bo), 0215 |
| Breton (br), 0218 |
| Catalan (ca), 0301 |
| Corsican (co), 0315 |
| Czech (cs), 0319 |
| Welsh (cy), 0325 |
| Danish (da), 0401 |
| Bhutani (dz), 0426 |
| Esperanto (eo), 0515 |
| Estonian (et), 0520 |
| Basque (eu), 0521 |
| Persian (fa), 0601 |
| Finnish (fi), 0609 |
| Fiji (fj), 0610 |
| Faroese (fo), 0615 |
| Frisian (fy), 0625 |
| Irish (ga), 0701 |
| Scottish Gaelic (gd), 0704 |
| Galician (gl), 0712 |
| Guarani (gn), 0714 |
| Gujarati (gu), 0721 |
| Hausa (ha), 0801 |
| Hindi (hi), 0809 |
| Croatian (hr), 0818 |
| Hungarian (hu), 0821 |
| Armenian (hy), 0825 |
| Interlingua (ia), 0901 |
| Interlingue (ie), 0905 |
| Inupiak (ik), 0911 |
| Indonesian (in), 0914 |
| Icelandic (is), 0919 |
| Hebrew (iw), 0923 |
| Yiddish (ji), 1009 |
| Javanese (jw), 1023 |
| Georgian (ka), 1101 |
| Kazakh (kk), 1111 |
| Greenlandic (kl), 1112 |
| Cambodian (km), 1113 |
| Kannada (kn), 1114 |
| Kashmiri (ks), 1119 |
| Kurdish (ku), 1121 |
| Kirghiz (ky), 1125 |
| Latin (la), 1201 |
| Lingala (ln), 1214 |
| Laotian (lo), 1215 |
| Lithusnian (lt), 1220 |
| Latvian, Lettish (lv), 1222 |
| Malagasy (mg), 1307 |
| Maori (mi), 1309 |
| Macedonian (mk), 1311 |
| Malayalam (ml), 1312 |
| Mongolian (mn), 1314 |
| Moldavian (mo), 1315 |
| Marathi (mr), 1318 |
| Malay (ms), 1319 |
| Maltese (mt), 1320 |
| Burmese (my), 1325 |
| Nauru (na), 1401 |
| Nepali (ne), 1405 |
| Norwegian (no), 1415 |
| Occitan (oc), 1503 |
| Oromo (om), 1513 |
| Oriya (or), 1518 |
| Panjabi (pa), 1601 |
| Polish (pl), 1612 |
| Pashto, Pushto (ps), 1619 |
| Quechua (qu), 1721 |
| Rhaeto-Romance (rm), 1813 |
| Kirundi (rn), 1814 |
| Rumanian (ro), 1815 |
| Kinyarwanda (rw), 1823 |
| Sanskrit (sa), 1901 |
| Sindhi (sd), 1904 |
| Sango (sg), 1907 |
| Serbo-Croatian (sh), 1908 |
| Shinghalese (si), 1909 |
| Slovak (sk), 1911 |
| Slovenian (sl), 1912 |
| Samoan (sm), 1913 |
| Shona (sn), 1914 |
| Somali (so), 1915 |
| Albanian (sq), 1917 |
| Serbian (sr), 1918 |
| Siswati (ss), 1919 |
| Sesotho (st), 1920 |
| Sundanese (su), 1921 |
| Swahili (sw), 1923 |
| Tamil (ta), 2001 |
| Telugu (te), 2005 |
| Tajik (tg), 2007 |
| Thai (th), 2008 |
| Tigrinya (ti), 2009 |
| Turkmen (tk), 2011 |
| Tagalog (tl), 2012 |
| Setswana (tn), 2014 |
| Tongan (to), 2015 |
| Turkish (tr), 2018 |
| Tsonga (ts), 2019 |
| Tatar (tt), 2020 |
| Twi (tw), 2023 |
| Ukrainian (uk), 2111 |
| Urdu (ur), 2118 |
| Uzbek (uz), 2126 |
| Vietnamese (vi), 2209 |
| Volapük (vo), 2215 |
| Wolof (wo), 2315 |
| Xhosa (xh), 2408 |
| Yoruba (yo), 2515 |
| Zulu (zu), 2621 |

You can play the compressed audio files stored in the external storage device (USB, SD).

❐ In the following description, the SD memory card, USB memory device and USB portable audio player are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device and USB portable audio player only, they are referred to as the “USB storage device”.

❐ When “**SD**” or “**USB**” selected as the AV source, the AV sounds, the navigation guidance and beep sounds are mixed and the volume can be adjusted simultaneously.

## Starting procedures

- **Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.**

The source changes and then playback will start if there is a playable file on the external storage device.

➲ For details, refer to *Plugging in a USB storage device* on page 14.

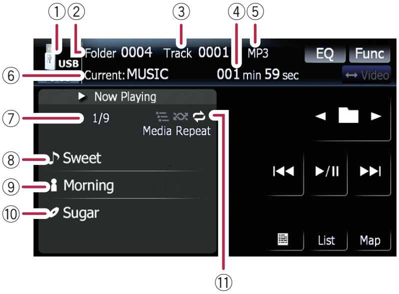
➲ For details, refer to *Inserting and ejecting an SD memory card* on page 13.

❐ If the external storage device is already set, touch [**USB**] or [**SD**] on the “**AV Source**” menu.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

❐ Playback is performed in order of folder number. Folders are skipped if they contains no playable files. (If there are no playable files on folder 001 (root folder), playback starts from folder 002.) ■

## Reading the screen



❐ Optimum performance of this unit may not be obtained depending on the connected external storage device.

❐ You can playback the files on a USB storage device compliant with Mass Storage Class. For details about the USB Class, refer to the manual supplied with USB storage device.

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**

③ **Track number indicator**

④ **Play time indicator**
Shows the elapsed playing time of the current track.

⑤ **File type indicator**
Shows the type of audio file currently playing.

⑥ **Current folder name indicator**
Shows the folder name currently playing.

⑦ **Current file number and total number of files**
Shows the file number currently played and the total number of playable audio files.

⑧ **Track title indicator***
Shows the title of the track currently playing (when available).

⑨ **Artist name indicator***
Shows the artist name currently playing (when available).

⑩ **Album title indicator***
Shows the title of the album for the current track (when available).

⑪ **Playback condition indicator**

The marks shown below appears and indicates the current playback condition.

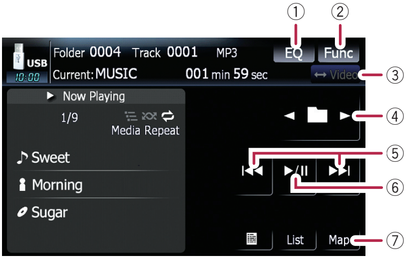
🔁: Repeat play
🔀: Random play
☰: Scan play

| Indicator | Implication |
|---|---|
| **Media Repeat** | All audio files in the current external storage device (USB, SD) are played repeatedly. This is default condition. |
| **Folder Repeat** | Current folder is played repeatedly. |
| **Track Repeat** | Current file is played repeatedly. |
| **Media Random** | All audio files in the current external storage device (USB, SD) are played in random order. |
| **Folder Random** | All audio files in the current folder are played in random order. |
| **Media Scan** | The beginning of each audio file is played for about 10 seconds. |
| **Folder Scan** | The beginning of each track in the current folder is played for about 10 seconds. |

➲ For more information, refer to *Using the "***Function***" menu* on the next page.

❐ The information marked with an asterisk (*) is displayed only when the information has been encoded on the compressed audio files. If specific information has not been encoded on the files, "—" is displayed instead. ■

## Using the touch panel keys (Music)



① **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the "Function" menu**
➲ For details, refer to *Using the "***Function***" menu* on the next page.

③ **Switch the operation screen**
Touching the key switches between the screen to operate music files and the screen to operate movie files. This touch panel key is available only when there are both audio and video file in the external storage device (USB, SD).

④ **Select the previous or next folder**
Touching [◀] or [▶] play the first playable file on the previous or next folder. The folders that there is no playable files are skipped.

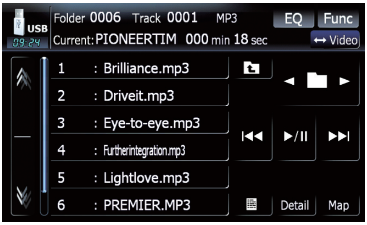
⑤ **Skip forward or backward**
Touching [▶▶|] skips to the start of the next file. Touching [|◀◀] once skips to the start of the current file. Touching again will skip to the previous file.
**Fast rewind or forward**
Keep touching [|◀◀] or [▶▶|] to perform fast rewind or forward.
❐ There is no sound on fast rewind or forward.
❐ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑥ **Playback and Pause**
Touching [▶/II] switches between playback and pause.

⑦ **Displaying the map screen**

## Selecting a track from the list

The list lets you see the list of track titles or folder names on a external storage device (USB, SD). If you touch a folder on the list, you can view its contents. If you touch a track on the list, you can play the selected track.



Folder 0006 Track 0001 MP3
Current: PIONEERTIM 000 min 18 sec

1 : Brilliance.mp3
2 : Driveit.mp3
3 : Eye-to-eye.mp3
4 : Furtherintegration.mp3
5 : Lightlove.mp3
6 : PREMIER.MP3

### 1 Touch [List].

### 2 Touch the folder that you want to view.

Touching ▲ or ▼ switches the selection to the next or previous page in the list.
Touching ↰ shows a content of the parent folder.

- ❒ If the selected folder does not contain any track that can be played, the track list is not displayed.

### 3 Touch the track you want to play.

- ❒ To cancel the list screen, touch [**Detail**].

## Browsing embedded text information

Text information recorded on an compressed audio file can be displayed.

### ● Touch ▤.

The next piece of information is displayed.

- **Album Title :** (album title)
- **Track Title :** (track title)
- **Folder Title :** (folder title)
- **File Name :** (file name)
- **Artist Name :** (artist name)

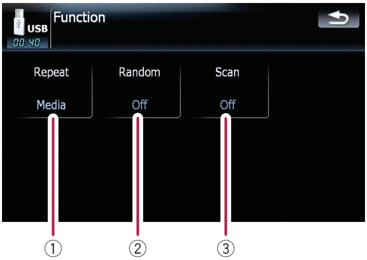
- ❒ If the information has not been recorded on files, nothing may be displayed.
- ❒ For WAV files, only the information marked with (*) can be displayed.
- ❒ If the characters recorded on the compressed audio file are not compatible with this navigation system, those characters may turn into garbled characters. ■

## Using the "Function" menu

### 1 Touch [USB] or [SD] on the "AV Source" menu to display the "USB" or "SD" screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

### 2 Touch [Func].



Repeat: Media
Random: Off
Scan: Off

① **Repeating play**

Each touch of [**Repeat**] changes the settings as follows:

- **Media** — Repeat all compressed audio files in the selected external storage device (USB, SD)
- **Track** — Repeat just the current track
- **Folder** — Repeat the current folder
- ❒ If you skip the file forward or backward when the repeat play range in "**Track**", the repeat play range changes to "**Folder**".

② **Play tracks in a random order**

Random play lets you playback tracks in random order within the current repeat range.

Touching [**Random**] switches between "**On**" and "**Off**".

- ❒ If you turn [**Random**] to "**On**" while the repeat play range is set to "**Track**", the repeat play range changes to "**Folder**" automatically.

③ **Scan folders and tracks**

Scan play lets you hear the first 10 seconds of each track. Scan play is performed in the current repeat play range.
Touching [**Scan**] switches between “**On**” and “**Off**”. When you find the desired track touch [**Scan**] to turn scan play off.

- ❐ After all tracks or folders scanning are finished, normal playback will begin again.
- ❐ If you turn [**Scan**] to “**On**” while the repeat play range is set to “**Track**”, the repeat play range changes to “**Folder**” automatically. ◘

# Playing the movie file (USB, SD)

You can play the video files stored in the external storage device (USB, SD).

❐ In the following description, the SD memory card, USB memory device and USB portable audio player are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device and USB portable audio player only, they are referred to as the “USB storage device”.

❐ When “**SD**” or “**USB**” selected as the AV source, the AV sounds, the navigation guidance and beep sounds are mixed and the volume can be adjusted simultaneously.

## Starting procedures

● **Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.**

The source changes and then playback will start if there is a playable file on the external storage device.

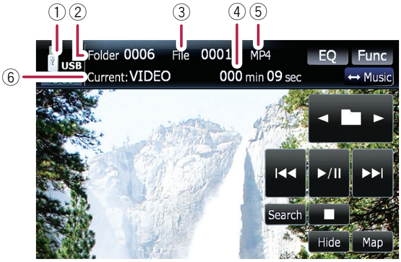
➲ For details, refer to *Plugging in a USB storage device* on page 14.

➲ For details, refer to *Inserting and ejecting an SD memory card* on page 13.

❐ If the external storage device is already set, touch [**USB**] or [**SD**] on the “**AV Source**” menu.

❐ Playback is performed in order of folder number. Folders are skipped if they contains no playable files. (If there are no playable files on folder 001 (root folder), playback starts from folder 002.) ■

## Reading the screen



❐ Optimum performance of this unit may not be obtained depending on the connected external storage device.

❐ You can playback the files on a USB storage device compliant with Mass Storage Class. For details about the USB Class, refer to the manual supplied with USB storage device.

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**

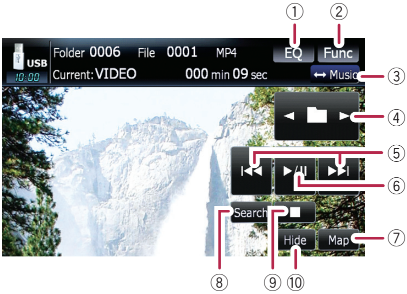
③ **File number indicator**

④ **Play time indicator**
Shows the elapsed playing time of the current track.

⑤ **File type indicator**
Shows the type of audio file currently playing.

⑥ **Current folder name indicator**
Shows the folder name currently playing. ■

## Using the touch panel keys (Video)


①
②
USB
10:00
Folder 0006
File 0001
MP4
EQ
Func
Current: VIDEO
000 min 09 sec
↔ Music
③
④
⑤
⑥
Search
Hide
Map
⑦
⑧
⑨
⑩

① **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the “Function” menu**
➲ For details, refer to *Using the “***Function***” menu* on the next page.

③ **Switch the operation screen**
Touching the key switches between the screen to operate music files and the screen to operate movie files. This touch panel key is available only when there are both audio and video file in the external storage device (USB, SD).

④ **Select the previous or next folder**
Touching [◀] or [▶] play the first playable file on the previous or next folder. The folders that there is no playable files are skipped.

⑤ **Skip forward or backward**
Touching [▶▶I] skips to the start of the next file. Touching [I◀◀] once skips to the start of the current file. Touching again will skip to the previous file.

**Fast rewind or forward**
Keep touching [I◀◀] or [▶▶I] to perform fast rewind or forward.

❒ There is no sound on fast rewind or forward.

❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑥ **Playback and Pause**
Touching [▶/II] switches between playback and pause.

⑦ **Displaying the map screen**

⑧ **Specify the chapter you want to play back or the time to start playback by entering a number**
➲ For details, refer to *Searching for a desired scene and starting playback from a specified time* on this page.

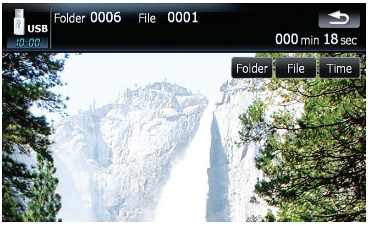
⑨ **Stop playback**

⑩ **Hides the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

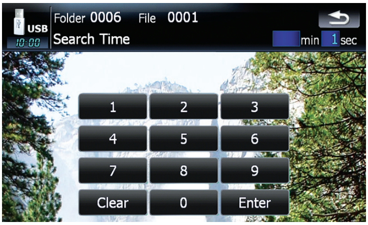
## Searching for a desired scene and starting playback from a specified time

You can search for a desired scene by specifying a folder number, file number or the time.

### 1 Touch [Search] and then touch [Folder], [File] or [Time].


USB
10:00
Folder 0006
File 0001
000 min 18 sec
Folder
File
Time

### 2 Touch the keys to input the desired number or time and then touch [Enter].


USB
10:00
Folder 0006
File 0001
Search Time
min
1 sec
1
2
3
4
5
6
7
8
9
Clear
0
Enter

**For folders, files**

- To select 3, touch [**3**] and [**Enter**] in order.

- To select 10, touch [**1**] and [**0**] and [**Enter**] in order.

**For time (time search)**

- To select 5 minutes 03 seconds, touch [**5**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**0**], [**0**] and [**Enter**] in order.

❒ To clear the input numbers, touch [**Clear**]. ■

## Using the “Function” menu

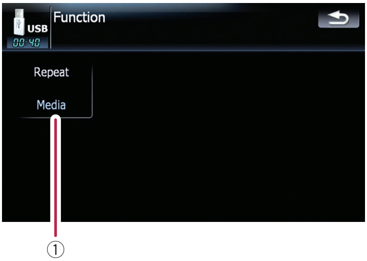
### 1 Touch [USB] or [SD] on the “AV Source” menu to display the “USB” or “SD” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

### 2 Touch the screen to display the touch panel keys.

### 3 Touch [Func].

❒ If the touch panel keys are not shown, touching anywhere to display them.



① **Repeating play**

Each touch of [**Repeat**] changes the settings as follows:

- **Media** — Repeat all video files in the selected external storage device (USB, SD)
- **File** — Repeat just the current file
- **Folder** — Repeat the current folder

❒ If you skip the file forward or backward when the repeat play range in “**Track**”, the repeat play range changes to “**Folder**”. ■

Using the USB interface cable for iPod enables you to connect your iPod to the navigation system.

- ❐ For connection, USB interface cable for iPod (CD-IU230V) (sold separately) is required.
- ❐ iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

## Starting procedures

### 1 Touch [AV1 Input] on the “AV Settings” menu to select the “iPod”.

- ➲ For details, refer to *Setting video input 1 (***AV1***)* on page 128.

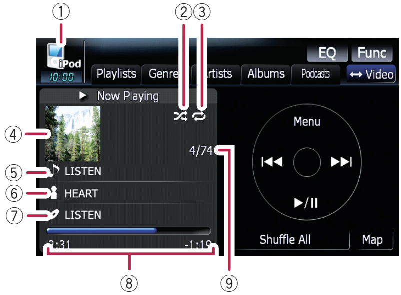
### 2 Connect your iPod.

The source changes and then playback will start.

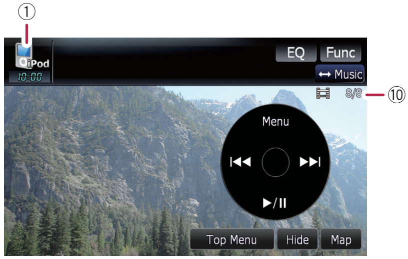
- ➲ For details, refer to *Connecting your iPod* on page 15.
- ❐ If the iPod is already connected, touch [**iPod**] on the “**AV Source**” menu.
- ➲ For details concerning operations, refer to *Screen switching overview* on page 18. ■

## Reading the screen

**Music**



**Video**



① **Source icon**
Shows which source has been selected.

② **Shuffle play indicator**
Appears when the shuffle play is activated.

③ **Repeat play indicator**
Appears when the repeat play is activated.
🔁 : All-tracks repeat
🔂 : One-track repeat

④ **Album artwork**
Album art of the current song is displayed if it is available.

⑤ **Song title (episode) indicator**
Shows the title of the current song. When the podcast is played, the episode is displayed.

⑥ **Artist name (podcast title) indicator**
Shows the artist name currently playing. When the podcast is played, the podcast title is displayed.

⑦ **Album title (release date) indicator**
Shows the title of the album for the song. When the podcast is played, the release date is displayed.

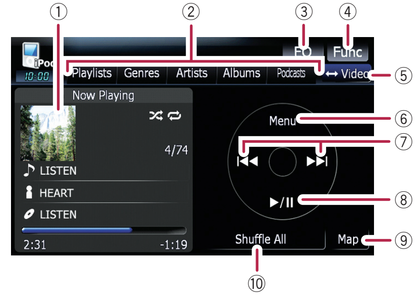
⑧ **Play time indicator**
Shows the elapsed playing time of the current song.

⑨ **Song number indicator**
Shows the number of the song currently playing and total number of songs in the selected list.

⑩ **Chapter number indicator**
Shows the current chapter number and total number of chapters when the video with chapters played.

❒ If the characters recorded on the iPod are not compatible with this navigation system, those characters may turn into garbled characters. ■

## Using the touch panel keys (Music)



① **Album artwork**
Touch the key to enlarge the album artwork. If you touch again, the artwork returns to a normal size.

② **Category tabs**
Shows the list to narrow down the songs. If you want to use the list of “**Audiobooks**”or “**Composers**”, touch [**Menu**] to display the lists.

③ **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

④ **Displaying the “Function” menu**
➲ For details, refer to *Using the “***Function***” menu* on page 93.

⑤ **Switch the operation screen**
Touching the key switches between the screen to operate music files and the screen to operate movie files. After touching the key, the top category menu appears to let you select the item for playback.
❒ This touch panel key is available only when there are both audio and video file in your iPod.

⑥ **Display the top category menu**
Touching the key displays the top category before you use the category tabs. If you select the song using the category tabs to play, touching the key displays the previous list.

⑦ **Skip back or forward to another song**
Touching [►►I] skips to the start of the next song. Touching [I◄◄] once skips to the start of the current song. Touching again will skip to the previous song. When the track with chapters played, chapter can be skipped back and forward.
**Fast rewind or forward**
Keep touching [I◄◄] or [►►I] to perform fast rewind or forward.
❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑧ **Playback and Pause**
Touching [►/II] switches between playback and pause.

⑨ **Displaying the map screen**

⑩ **Shuffle All**
All songs (except for the track in “**Audiobooks**”and “**Podcasts**”) in your iPod can be played randomly.
❒ To cancel the random play, switch [**Shuffle**] on the “**Function**” menu to the “**Off**” .

## Browsing for a song

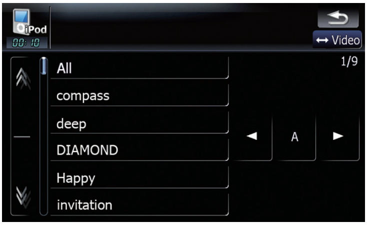
Touching the item on list allows you to search for a song and play it in your iPod.

### Narrowing down a song with the list

**1 Touch your desired category tab to display the song or track list.**

- **Playlists** (playlists)
- **Genres** (genres)
- **Artists** (artists)
- **Albums** (albums)
- **Podcasts** (podcasts)

The search screen is displayed.


iPod
00:10
↔ Video
1/9
All
compass
deep
DIAMOND
Happy
invitation
◄
A
►

**2 Touching ⩓ or ⩔ switches the selection to the next or previous page in the list.**

**3 Touch the item that you want to refine.**

Refine the item until the track title is displayed on the list.

- ❐ Touching [**All**] on the list includes all options in the current list. For example, if you touch [**All**] after touching [**Artists**], you can proceed to next screen with selecting all artists in the list.
- ❐ After you select **Artists**, **Albums**, or **Genres**, continued touching one of the list allows you to start playing the first songs in the selected list and display the next options.

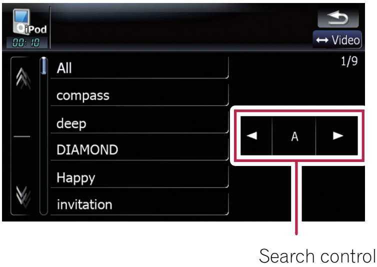
**4 On the song (or episode) list, touch the track you want to play.**

- ❐ After you select the track using this function, touching [**Menu**] displays the list previously selected.

## Searching for applicable items by alphabet

Using the search control displays the page includes the first applicable option.

- ❐ This function is available for the alphabetical list only.


iPod
00:10
↔ Video
1/9
All
compass
deep
DIAMOND
Happy
invitation
◄
A
►
Search control

**1 Touch your desired category tab to display the list.**

**2 Touch the item that you want to refine.**

**3 Touch [◄] or [►] to select the character.**

- ❐ "THE" or "The" and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.

**4 Touch the character key to display the page includes applicable options.**

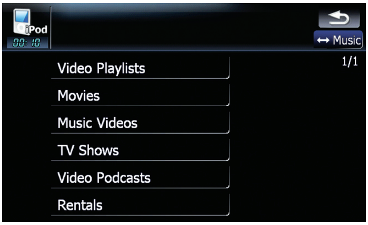
**5 On the song (or episode) list, touch the track you want to play.** ■

# Starting the video playback

This navigation system can play video if an iPod with video capabilities is connected.

**1 Touch [Video].**

**2 Touch one of the categories in that contains the video you want to play.**


iPod
00:10
↔ Music
1/1
Video Playlists
Movies
Music Videos
TV Shows
Video Podcasts
Rentals

Video playback will start.

### 3 Touch your desired item on the list to narrow down them until the video list appears.

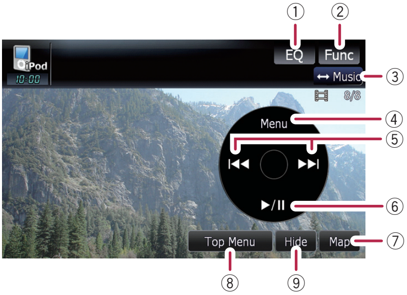
- ➲ For details concerning operations, refer to *Browsing for a video* on this page.

### 4 On the video list, touch the video you want to play.

### 5 Touch the screen to display to touch panel keys.

- ➲ For details concerning operations, refer to *Using the touch panel keys* (**Video**) on this page. ■

## Using the touch panel keys (Video)



① **Recalls equaliser curves**

- ➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the "Function" menu**

- ➲ For details, refer to *Using the "***Function***" menu* on the next page.

③ **Switch the operation screen**

Touching the key switches between the screen to operate music files and the screen to operate movie files. After touching the key, the top category menu appears to let you select the item for playback.

- ❐ This touch panel key is available only when there are both audio and video file in your iPod.

④ **Display the previous selected list**

If you select the video from the list to play after touching **Top Menu**, touching the key displays the previous list. (If you touch **Top Menu** again but do not select a video, this key is disabled until you select a video with the list next time.)

⑤ **Skip back or forward to another song**

Touching [⏭] skips to the start of the next video. Touching [⏮] once skips to the start of the current video. Touching again will skip to the previous video. When the video with chapters played, chapter can be skipped back and forward.

**Fast rewind or forward**

Keep touching [⏮] or [⏭] to perform fast rewind or forward.

- ❐ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑥ **Playback and Pause**

Touching [▶/❚❚] switches between playback and pause.

⑦ **Displaying the map screen**

⑧ **Display the top category menu for video**

Touching the key displays the top category for video playback.

⑨ **Hides the touch panel keys**

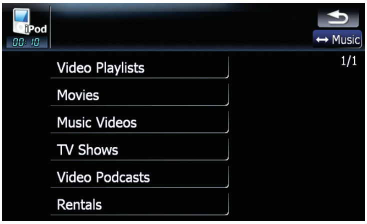
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

## Browsing for a video

Touching the item on list allows you to search for a video and play it in your iPod.

### Narrowing down a video with the list

**1 Touch your desired category.**


iPod
00:10
↔ Music
1/1
Video Playlists
Movies
Music Videos
TV Shows
Video Podcasts
Rentals

**2 Touching ▲ or ▼ switches the selection to the next or previous page in the list.**

**3 Touch the item that you want to refine.**
Refine the item until the track title is displayed on the list.

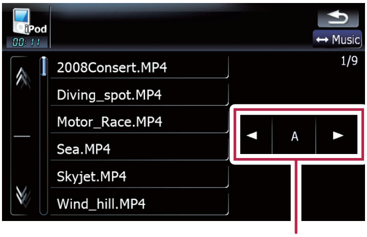
**4 On the video list, touch the video you want to play.**

- ❒ After you select the video using this function, touching [**Menu**] displays the list previously selected.

### Searching for applicable items by alphabet

Using the search control displays the page includes the first applicable option.

- ❒ This function is available for the alphabetical list only.


iPod
00:11
↔ Music
1/9
2008Consert.MP4
Diving_spot.MP4
Motor_Race.MP4
Sea.MP4
Skyjet.MP4
Wind_hill.MP4
◀
A
▶

Search control

**1 Touch your desired category.**

**2 Touch the item that you want to refine.**

**3 Touch [◀] or [▶] to select the character.**

- ❒ "THE" or "The" and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.

**4 Touch the character key to display the page includes applicable options.**

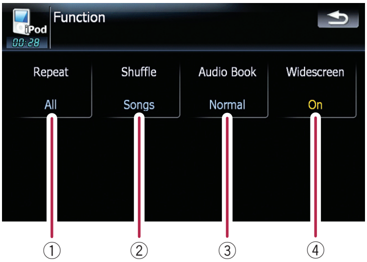
**5 On the video list, touch the video you want to play.** ■

## Using the "Function" menu

**1 Touch [iPod] on the "AV Source" menu to display the control screen for "iPod".**

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**2 Touch [Func].**


iPod
00:28
Function
Repeat
All
Shuffle
Songs
Audio Book
Normal
Widescreen
On
①
②
③
④

① **Setting the repeat play**
There are two repeat play types for the playback.
Each touch of [**Repeat**] changes the settings as follows:

- **One** — Repeats just the current track
- **All** — Repeats all tracks in the selected list

② **Setting the shuffle play for music**
This function shuffles songs or albums and plays them in random order.
Each touch of [**Shuffle**] changes the settings as follows:

- **Off** — Does not shuffle.
- **Songs** — Play back songs in random order within the selected list

- **Albums** — Select an album randomly, and then play back all songs in that album in order

③ **Setting the audiobook play speed**
While listening to an audiobook on iPod, playback speed can be changed.
Each touch of [**Audio Book**] changes the settings as follows:
- **Normal** — Playback in normal speed
- **Slower** — Playback slower than normal speed
- **Faster** — Playback faster than normal speed

④ **Playback the video on the wide screen mode**
If the video is compatible with wide screen format, set [**Widescreen**] to [**On**] in order to view the video image in the wide screen.
Each touch of [**Widescreen**] changes the settings as follows:
- **On** — Outputs the wide-screen video from iPod
- **Off** — Outputs the normal-sized video from iPod

❒ Display size is changed after you change “**Widescreen**” setting and select the video to play.

❒ This setting is available only during the video operation. ■

# Using the radio (FM)

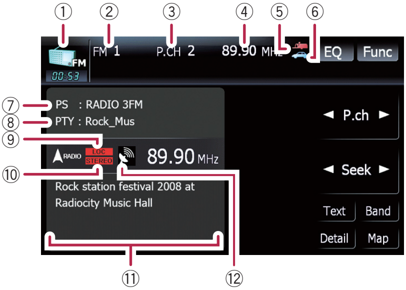
You can listen to the radio by using the navigation system. This section describes operations for radio (FM).

The functions related to RDS (Radio Data System) are available only in areas with FM stations broadcasting RDS signals. Even if the navigation system is receiving an RDS station, not all the functions related with RDS will be available.

● **Touch [FM] on the "AV Source" menu to display the "FM" screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 18.

## Reading the screen


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
FM
00:53
FM 1
P.CH 2
89.90 MHz
EQ
Func
PS : RADIO 3FM
PTY : Rock_Mus
RADIO
LOC
STEREO
89.90 MHz
Rock station festival 2008 at
Radiocity Music Hall
◄ P.ch ►
◄ Seek ►
Text
Band
Detail
Map

① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the radio is tuned to: FM1 to FM3.

③ **Preset number indicator**
Shows what preset item has been selected.

④ **Frequency indicator**

⑤ **NEWS indicator**
Shows the status of news programmes.

⑥ **TRFC indicator**
Shows the status of traffic announcements.

⑦ **Programme service name indicator**
Shows the programme service name (station name) of the current station. If the programme service name (station name) cannot be received, the frequency will be displayed instead.

⑧ **PTY indicator**
Shows the programme type of the current station (when available).

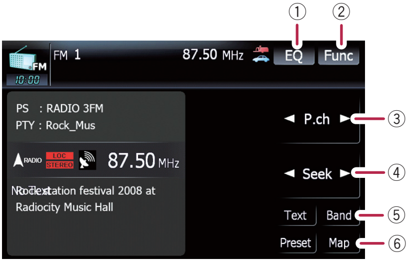
⑨ **LOCAL indicator**
Shows when local seek tuning is on.

⑩ **STEREO indicator**
Shows that the frequency selected is being broadcast in stereo.

⑪ **Radio text display area**
Displays the radio text currently received.

⑫ **Signal level indicator** ■

## Using the touch panel keys


①
②
③
④
⑤
⑥
FM
10:00
FM 1
87.50 MHz
EQ
Func
PS : RADIO 3FM
PTY : Rock_Mus
RADIO
LOC
STEREO
87.50 MHz
No Text
Rock station festival 2008 at
Radiocity Music Hall
◄ P.ch ►
◄ Seek ►
Text
Band
Preset
Map

① **Recalls equaliser curves**

➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the "Function" menu**

➲ For details, refer to *Using the "***Function***" menu* on page 97.

③ **Select a preset channel**
[◄] or [►] can be used to switch preset channels.

④ **Perform manual tuning**
To perform manual tuning, touch [◄] or [►] briefly. The frequencies move up or down one step at a time.

**Perform seek tuning**
To perform seek tuning, keep touching [◄] or [►] for about one second and release. The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

- ❐ You can cancel seek tuning by touching either [◀] or [▶] briefly.
- ❐ If you keep touching [◀] or [▶], you can skip broadcasting frequencies. Seek tuning will start as soon as you release the keys.
- ❐ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑤ **Select an FM band**

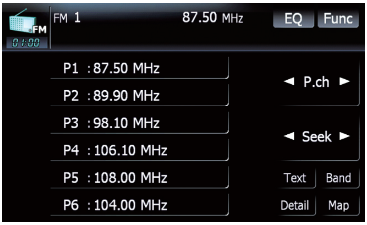
Touch [**Band**] repeatedly until the desired FM band is displayed, **FM1**, **FM2** or **FM3**.

- ❐ This function is convenient for preparing different preset lists for each band.

⑥ **Displaying the map screen**

## Switching between the detailed information display and the preset list display

You can switch the left side of the basic screen according to your preference.



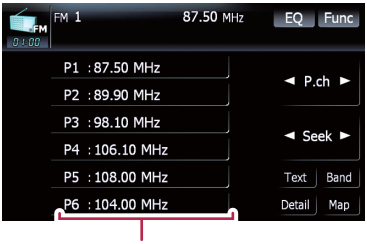
P1 : 87.50 MHz
P2 : 89.90 MHz
P3 : 98.10 MHz
P4 : 106.10 MHz
P5 : 108.00 MHz
P6 : 104.00 MHz

- **Touch [Preset] (or [Detail]).**

Each touch of [**Preset**] (or [**Detail**]) changes the detailed information display or preset list display.

## Storing and recalling broadcast stations

With a touch of any of the preset tuning keys ([**P1**] to [**P6**]), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).



P1 : 87.50 MHz
P2 : 89.90 MHz
P3 : 98.10 MHz
P4 : 106.10 MHz
P5 : 108.00 MHz
P6 : 104.00 MHz

Preset tuning keys

**1 When you find a frequency that you want to store in memory, keep touching a preset tuning key [P1] to [P6] until the preset number (e.g., P.ch 1) stops flashing.**

The selected radio station has been stored in memory.

- ❐ Up to 18 FM stations, 6 for each of the three FM bands, as well as 6 MW/LW stations can be stored in memory.

**2 The next time you touch the same preset tuning key [P1] to [P6], the radio station frequencies are recalled from memory.**

- ❐ You can also use [◀] and [▶] to recall radio stations assigned to preset tuning keys [**P1**] to [**P6**].

## Using radio text

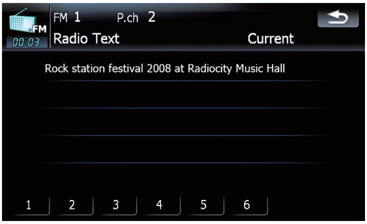
This tuner can display radio text data transmitted by RDS stations, such as station information, the name of the currently broadcast song and the name of the artist.

- ❐ The tuner automatically memorises the three latest radio text broadcasts received, replacing text from the least recent reception with new text when it is received.

## Displaying radio text

You can display the currently received radio text and the three most recent radio text transmissions.

**1 Touch [Text] to display radio text.**
Radio text for the currently broadcasting station is displayed.



Rock station festival 2008 at Radiocity Music Hall

- ❒ When no radio text is received, "**No Text**" is displayed.

**2 Touch [1] - [6].**
Touching the keys switches the text contents from the current radio text to the most recent three radio text transmissions.

- ❒ If there is no radio text data in memory the display will not change.

## Storing and recalling radio text

You can store data from up to six radio text transmissions in the touch panel keys [**1**] — [**6**].

**1 Display the radio text you want to store in memory.**

- ➲ For details, refer to *Displaying radio text* on this page.

**2 Touch any of the keys [1] — [6] to store the displayed radio text.**
The selected radio text is stored in memory. The next time you press the same keys [**1**] — [**6**] in the radio text display, the stored text is recalled from memory.

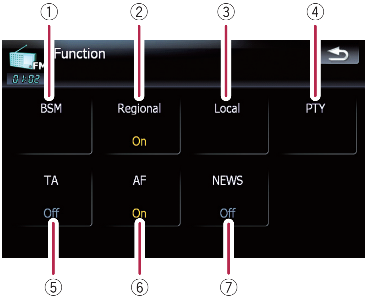
- ❒ If the radio text data already stored under memory [**1**] — [**6**], the radio text memorised afterward will overwrite the existing one. ■

# Using the "Function" menu

**1 Touch [FM] on the "AV Source" menu to display the "FM" screen.**

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**2 Touch [Func].**



① **Storing the strongest broadcast frequencies**
- ➲ For details, refer to this page.

② **Limiting stations to regional programming**
- ➲ For details, refer to the next page.

③ **Tuning in strong signals**
- ➲ For details, refer to the next page.

④ **Searching for an RDS station by PTY information**
- ➲ For details, refer to the next page.

⑤ **Receiving traffic announcements**
- ➲ For details, refer to page 99.

⑥ **Tuning into alternative frequencies**
- ➲ For details, refer to page 99.

⑦ **Using news programme interruption**
- ➲ For details, refer to page 100.

## Storing the strongest broadcast frequencies

"**BSM**" (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys [**P1**] to [**P6**] and, once stored there, you can tune in to these frequencies with the touch of a key.

**1 Touch [BSM].**

**2 Touch [Start] to start “BSM”.**

**BSM** begins to flash. While **BSM** is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys [**P1**] to [**P6**] in order of their signal strength. When this is complete, **BSM** stops flashing.

- ❒ To cancel the storage process, touch [**Stop**].
- ❒ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have already saved by using [**P1**] to [**P6**].

## Limiting stations to regional programming

When AF is used to automatically retune frequencies, the regional function limits the selection to stations broadcasting regional programmes.

● **Touching [Regional] switches between [On] and [Off].**

- ❒ Regional programming and regional networks are organised differently depending on the country (i.e., they may change according to the time, country or broadcast area).
- ❒ The preset number may disappear on the display if the tuner tunes in a regional station that differs from the originally set station.
- ❒ The regional function can be turned on or off independently for each FM band.

## Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

**1 Touch [Local].**

**2 Touch [On] to turn local seek tuning on.**

To turn local seek tuning off, touch [**Off**].

**3 Touch [◄Prev] or [Next►] to set the sensitivity.**

There are four levels of sensitivity for FM.

Level: **1** — **2** — **3** — **4**

- ❒ The level “**4**” setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

## Searching for an RDS station by PTY information

You can search for general types of broadcasting programmes.

➲ For details, refer to *PTY list* on page 101.

**1 Touch ◄Prev or Next► to select a programme type.**

There are four programme types:

**News&INF** — **Popular** — **Classics** — **Others**

**2 Touch [Start] to begin the search.**

The tuner searches for a station broadcasting that programme type.

- ❒ To cancel the search, touch [**Stop**].
- ❒ The programmes of some stations may differ from that indicated by the transmitted PTY.
- ❒ If no station is broadcasting the type of programme you searched for, **Not Found** is displayed for about two seconds and then the tuner returns to the original station.

### Receiving PTY alarm broadcasts

PTY alarm is a special PTY code for announcements regarding emergencies such as natural disasters. When the tuner receives the radio alarm code, **ALARM** appears on the display and the volume adjusts to the TA volume. When the station stops broadcasting the emergency announcement, the system returns to the previous source.

- ❒ An emergency announcement can be cancelled by touching [**Cancel**].
- ❒ You can also cancel an emergency announcement by changing the source or band.

## Receiving traffic announcements

**TA** (traffic announcement standby) lets you receive traffic announcements automatically, no matter what source you are listening to. **TA** can be activated for both a TP station (a station that broadcasts traffic information) or another enhanced network's TP station (a station carrying information that cross-references TP stations).

**1 Tune in a TP station or another enhanced network's TP station.**

When you are tuned into a TP station or another enhanced network's TP station 🚗 or 🚗 indicator will light.

**2 Touch [TA] on the "Function" menu to turn traffic announcement standby on.**

🚗 appears in the display. The tuner will standby for traffic announcements. If you turned **TA** function on while tuned in to neither a TP station nor another enhanced network's TP station, 🚗 indicator lights.

To turn traffic announcements standby off, touch [**TA**] again.

**3 Use MULTI-CONTROL to adjust the TA volume when a traffic announcement begins.**

The newly set volume is stored in memory and recalled for subsequent traffic announcements.

**4 Touch [Cancel] while a traffic announcement is being received to cancel the announcement.**

The tuner returns to the original source but remains in standby mode until [**TA**] is touched again.

You can also cancel the announcement by changing the source or band.

- ❒ When the preset list is displayed, **TA** function icon will not be displayed.
- ❒ The system switches back to the original source following traffic announcement reception.
- ❒ Only TP stations and other enhanced network's TP stations are tuned in during seek tuning or BSM when **TA** is on.

## Tuning into alternative frequencies

If you are listening to a broadcast and the reception becomes weak or there are other problems, the navigation system will automatically search for a different station in the same network that is broadcasting a stronger signal.

- **Touching [AF] switches between [On] and [Off].**
  - ❒ **AF** is on as a default.
  - ❒ Only RDS stations are tuned in during seek tuning or BSM when AF is on.
  - ❒ When you recall a preset station, the tuner may update the preset station with a new frequency from the station's AF list. (This is only available when using presets on **FM1** or **FM2** bands.) No preset number appears on the display if the RDS data for the station received differs from that for the originally stored station.
  - ❒ Sound may be temporarily interrupted by another programme during an AF frequency search.
  - ❒ AF can be turned on or off independently for each FM band.

### PI Seek operation

If the unit fails to find a suitable alternative frequency, or if you are listening to a broadcast and the reception becomes weak, the navigation system will automatically search for a different station with the same programming. During the search, **PI SEEK** is displayed and the output is muted. The muting is discontinued after completion of the PI Seek, whether or not a different station is found.

### Activating the Auto PI seek for preset stations

When preset stations cannot be recalled, as when travelling long distances, the unit can be set to perform PI Seek during preset recall.

❒ The default setting for Auto PI Seek is off.

➲ For details, refer to *Switching* **Auto PI** *seek* on page 130.

## Using news programme interruption

When a news programme is broadcast from a PTY code news station, the navigation system can switch from any station to the news broadcast station. When the news programme ends, reception of the previous programme resumes.

- **Touching [NEWS] switches between [On] and [Off].**

Touch [**NEWS**] until 📪 or 📫 appears in the display.
To turn off news programme interruption, touch [**NEWS**] again.
A news programme can be cancelled by touching [**Cancel**].
You can also cancel the news programme by changing the source or band.

  ❒ When the preset list is displayed, **NEWS** function icon will not be displayed.

## About interruption icon status (e.g. TRFC icon)

The indication of the status icon changes according to the situation as shown below.

| Indicator | Implication |
|---|---|
| 🚗 or<br>**TRFC** 🚗 | Information interruption is ON, but you will not receive data since there is none. |
| 🚗 | Even if the information interruption is turned OFF, data is still received. (You can receive when information interruption is turned ON.) |
| 🚗 or<br>**TRFC** 🚗 | The information interruption is turned ON, and currently receiving data. |
| (No display) | Information interruption is turned OFF, and no data is being received. |

## PTY list

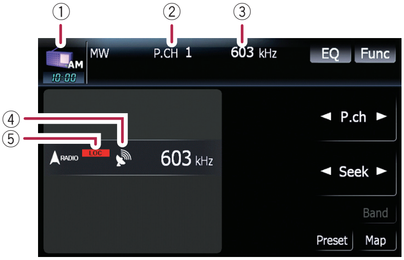
| General | Specific | Type of programme |
|---|---|---|
| **News&INF** | **News** | News |
| | **Affairs** | Current affairs |
| | **Info** | General information and advice |
| | **Sport** | Sports |
| | **Weather** | Weather reports/meteorological information |
| | **Finance** | Stock market reports, commerce, trading, etc. |
| **Popular** | **Pop Mus** | Popular music |
| | **Rock Mus** | Contemporary modern music |
| | **Easy Mus** | Easy listening music |
| | **Oth Mus** | Non categorised music |
| | **Jazz** | Jazz |
| | **Country** | Country music |
| | **Nat Mus** | National music |
| | **Oldies** | Oldies music, golden oldies |
| | **Folk Mus** | Folk music |
| **Classics** | **L. Class** | Light classical music |
| | **Classic** | Serious classical music |
| **Others** | **Educate** | Educational programmes |
| | **Drama** | All radio plays and serials |
| | **Culture** | National or regional culture |
| | **Science** | Nature, science and technology |
| | **Varied** | Light entertainment |
| | **Children** | Children's |
| | **Social** | Social affairs |
| | **Religion** | Religion affairs or services |
| | **Phone In** | Phone In |
| | **Touring** | Travel programmes, not for announcements about traffic problems |
| | **Leisure** | Hobbies and recreational activities |
| | **Document** | Documentaries |

■

You can listen to the radio by using this navigation system. This section describes operations for radio (AM).

- **Touch [AM] on the “AV Source” menu to display the “AM” screen.**
  ➲ For details concerning operations, refer to *Screen switching overview* on page 18.

## Reading the screen


①
②
③
④
⑤
AM
10:00
MW
P.CH 1
603 kHz
EQ
Func
◄ P.ch ►
◄ Seek ►
Band
Preset
Map
RADIO
LOC
603 kHz

① **Source icon**
Shows which source has been selected.

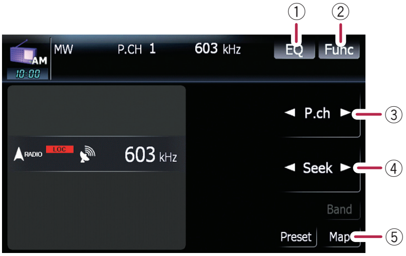
② **Preset number indicator**
Shows what preset item has been selected.

③ **Frequency indicator**

④ **Signal level indicator**

⑤ **LOCAL indicator**
Shows when local seek tuning is on. ■

## Using the touch panel keys


①
②
③
④
⑤
AM
10:00
MW
P.CH 1
603 kHz
EQ
Func
◄ P.ch ►
◄ Seek ►
Band
Preset
Map
RADIO
LOC
603 kHz

① **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

② **Displaying the “Function” menu**
➲ For details, refer to *Using the “**Function**” menu* on the next page.

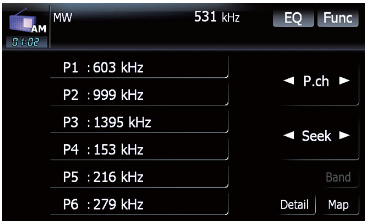
③ **Select a preset channel**
◄ or ► can be used to switch presets.

④ **Perform manual tuning**
To perform manual tuning, touch [◄] or [►] briefly. The frequencies move up or down one step at a time.
**Perform seek tuning**
To perform seek tuning, keep touching [◄] or [►] for about one second and release. The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
- ❒ You can cancel seek tuning by touching either [◄] or [►] briefly.
- ❒ If you keep touching [◄] or [►], you can skip broadcasting frequencies. Seek tuning will start as soon as you release the keys.
- ❒ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑤ **Displaying the map screen**

## Switching between the detailed information display and the preset list display

You can switch the left side of the basic screen according to your preference.


AM
01:02
MW
531 kHz
EQ
Func
◄ P.ch ►
◄ Seek ►
Band
Detail
Map

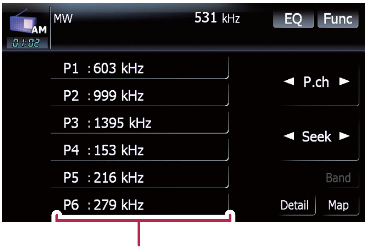
P1 : 603 kHz
P2 : 999 kHz
P3 : 1395 kHz
P4 : 153 kHz
P5 : 216 kHz
P6 : 279 kHz

- **Touch [Preset] (or [Detail]).**

Each touch of [**Preset**] (or [**Detail**]) changes the detailed information display or preset list display.

## Storing and recalling broadcast stations

With a touch of any of the preset tuning keys ([**P1**] to [**P6**]), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).



Preset tuning keys

**1 When you find a frequency that you want to store in memory, keep touching a preset tuning key [P1] to [P6] until the preset number (e.g., P.ch 1) stops flashing.**

The selected radio station has been stored in memory.

**2 The next time you touch the same preset tuning key [P1] to [P6], the radio station frequencies are recalled from memory.**

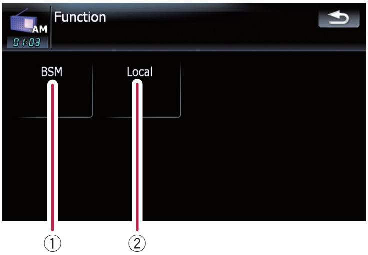
- ❒ You can also use [◄] and [►] to recall radio stations assigned to preset tuning keys [**P1**] to [**P6**]. ■

## Using the “Function” menu

**1 Touch [AM] on the “AV Source” menu to display the “AM” screen.**

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18.

**2 Touch [Func].**



① **Storing the strongest broadcast frequencies**
- ➲ For details, refer to this page.

② **Tuning in strong signals**
- ➲ For details, refer to this page.

## Storing the strongest broadcast frequencies

“**BSM**” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys [**P1**] to [**P6**] and, once stored there, you can tune in to these frequencies with the touch of a key.

- **Touch [Start] to turn BSM on.**

**BSM** begins to flash. While **BSM** is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys [**P1**] to [**P6**] in order of their signal strength. When this is complete, **BSM** stops flashing.

- ❒ To cancel the storage process, touch [**Stop**].
- ❒ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have already saved by using [**P1**] to [**P6**].

## Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

**1 Touch [On] to turn local seek tuning on.**

To turn local seek tuning off, touch [**Off**].

**2 Touch [◄Prev] or [Next►] to set the sensitivity.**

There are two levels of sensitivity for AM.

Level: **1** — **2**

- ❐ The level “**2**” setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. ■

You can display “video image” output by **AV1 Input** or **AV2 Input** to the screen of the navigation system. For details of the connection method, refer to “Installation Manual”.

**CAUTION**

For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and apply the handbrake.

## Using the AV1

You can display “video image” output by the equipment connected to “**AV1 Input**”.

### 1 Touch [AV1 Input] on the “AV Settings” menu.

- ➲ For details, refer to *Setting video input 1 (**AV1**)* on page 128.

### 2 Touch [AV1] on the “AV Source” menu.

The image is displayed on the screen.

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18. ■

## Using the AV2

You can display “video image” output by the equipment connected to “**AV2 Input**”.

### 1 Touch [AV2 Input] on the “AV Settings” menu.

- ➲ For details, refer to *Setting video input 2 (**AV2**)* on page 128.

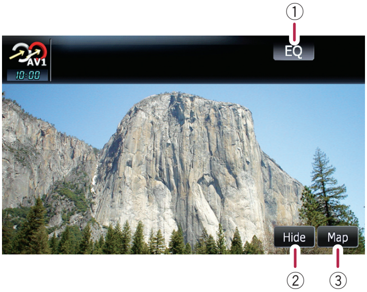
### 2 Touch [AV2] on the “AV Source” menu.

The image is displayed on the screen.

- ➲ For details concerning operations, refer to *Screen switching overview* on page 18. ■

## Using the touch panel keys

● **Touch the screen to display the touch panel keys.**



① **Recalls equaliser curves**
- ➲ For details, refer to *Recalling equaliser curves* on page 125.

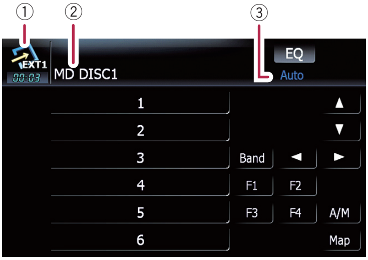
② **Hides the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

③ **Displaying the map screen** ■

The term “external unit” refers to future Pioneer devices that are not currently planned for, or to devices that allow control of basic functions although they are not fully controlled by the navigation system. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them as external unit 1 or external unit 2.
For details of the connection method, refer to “Installation Manual”.
For details concerning operation, refer to the external unit’s operation manual. This section provides information on external unit operations with the navigation system that differ from those described in the external unit’s operation manual.

❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

## Reading the screen



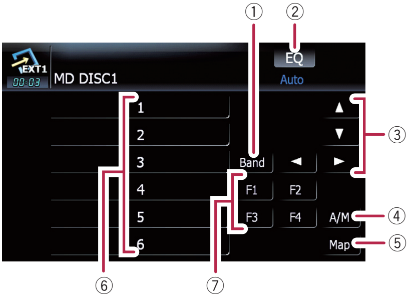
① **Source icon**
Shows which source has been selected.

② **External unit indicator**
Displays the information that send by connected external units.

③ **Auto/Manual mode indicator**
Shows the current mode. ■

## Using the touch panel keys

- **Touch [EXT1] or [EXT2] on the “AV Source” menu to select the external unit.**
  ➲ For details concerning operations, refer to *Screen switching overview* on page 18.



① **Send a band command**
Touch to send a band command to the external unit.
❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

② **Recalls equaliser curves**
➲ For details, refer to *Recalling equaliser curves* on page 125.

③ **Send an [▲], [▼], [◄], or [►] command**
Touch to operate the external unit.
❒ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

④ **Switching the automatic and manual function**
You can turn automatic and manual function on or off.
You can switch between **Auto** and **Manual** functions of the external unit connected. Initially, this function is set to **Auto**.
❒ Operating commands set for **Auto** and **Manual** operations vary depending on the external unit connected.

⑤ **Displaying the map screen**

⑥ **Send a 1 key to 6 key command**

The external unit can be operated by transmitting the operating commands set to **1** key — **6** key.

❒ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

⑦ **Operate the external unit by using F1 — F4**

The external unit can be operated by transmitting the operating commands set to **F1** — **F4**.

❒ The operating commands set to **F1** — **F4** vary depending on the external unit.

❒ Some functions may not be used until you touch and hold the key. ■

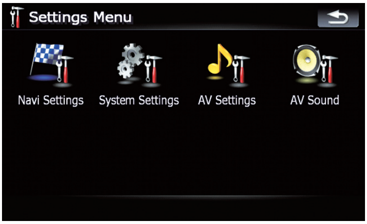
# The options in the "Navi Settings" menu

## Basic operations in the "Navi Settings" menu

Preferences related to the navigation functions can be set.
A method for changing the volume setting for the navigation guidance and beep is described here, along with an operational example.

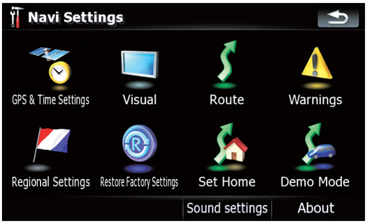
**1 Press MENU button to display the "Top Menu", and then touch [Settings].**

**2 Touch [Navi Settings].**


Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound

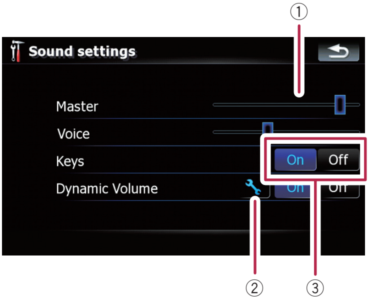
The "**Navi Settings**" menu appears.

**3 Touch [Sound settings].**


Navi Settings
GPS & Time Settings
Visual
Route
Warnings
Regional Settings
Restore Factory Settings
Set Home
Demo Mode
Sound settings
About

The "**Sound settings**" menu appears.

**4 Use the tool assigned to the desired option to change the settings.**


①
Sound settings
Master
Voice
Keys
On
Off
Dynamic Volume
On
Off
②
③

① **Slider**
Touching the desired point on the bar or dragging the slider to the desired point allows you to change the value.

② **Detailed setup key**
Displays the screen for setting the preferences in detail.

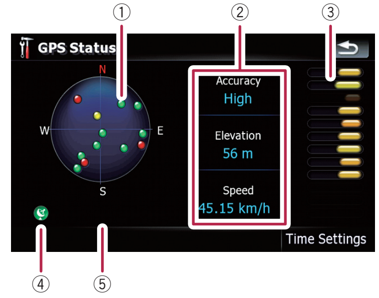
③ **On-off control**
Touching [**On**] or [**Off**] enables activation or deactivation of this function.

**5 Touch ↩ to return to the "Navi Settings" menu.**

## GPS & Time Settings

Indicates the connection status of the GPS aerial, its reception sensitivity, and from how many satellites the signal is being received.

- **Touch [GPS & Time Settings] on the "Navi Settings" menu.**
The "**GPS Status**" screen appears.



Accuracy
High

Elevation
56 m

Speed
45.15 km/h

① Positions of the GPS constellation being received by the navigation system

| Colour | Signal communication | Used in positioning |
|---|---|---|
| Green | Yes | Yes |
| Grey | Yes | No |
| Red | No | No |

② Shows the current comprehensive accuracy, altitude and speed.
③ Shows each satellite's signal strength.
④ Shows the connection status or reception condition of GPS aerial.

| Colour | Condition |
|---|---|
| Green | 3D reception (Normal positional accuracy) |
| Yellow | 2D reception (lower positional accuracy) |
| Red | Connected and no reception |
| Black with x | No connection |

⑤ Shows the GPS reception status. A blinking green lamp indicates whether positioning is works normally. If the lamp lights up in another colour, there is a problem related with GPS reception. In such case, check whether the connection and installation are correct.

## Time Settings

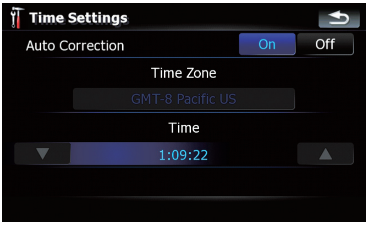
The "**Time Settings**" screen provides you to set the time manually.

### 1 Touch [GPS & Time Settings] on the "Navi Settings" menu.

The "**GPS Status**" screen appears.

### 2 Touch [Time Settings].

The "**Time Settings**" screen appears.



Auto Correction ● On ○ Off

Time Zone
GMT-8 Pacific US

Time
▼ 1:09:22 ▲

Available options;

- "**Auto Correction**"
  Synchronises the internal clock of this navigation system with the accurate time transmitted from GPS (GMT). Changing this preference allows you to set the time manually.

  **CAUTION**
  Turning "**Auto Correction**" to "**Off**" disables the automatic change to the appropriate time zone. Note that the proper route may not be calculated if the time you set does not match the time zone of the area that your route passes through.

  [**On**]:
  Corrects the current time by changing the time zone automatically according to this system's whereabouts.
  [**Off**]:
  Corrects the current time according to the settings on "**Time Zone**" and "**Time**".
- "**Time Zone**"
  Enables you to set the time zone manually. Touch the key to show the list and then touch the current time zone.

- “**Time**”
  Enables you to adjust the time difference by one hour. Touch ▲ or ▼ to adjust it.
  ❐ “**Time Zone**” and “**Time**” are activated only when [**Off**] is selected.

## 3D Settings

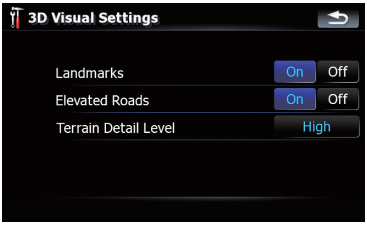
The 3D map screen settings can be customised.

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [3D Settings].

The “**3D Visual Settings**” screen appears.



3D Visual Settings

Landmarks [✓ On] Off
Elevated Roads [✓ On] Off
Terrain Detail Level High

Available options;

- “**Landmarks**”
  You can select whether to draws or refrain from drawing graphical 3D landmarks on the map.
- “**Elevated Roads**”
  You can select whether to draws or refrain from drawing elevated roads, interchanges, and bridges on the map.
- “**Terrain Detail Level**”
  [**High**], [**Medium**], [**Low**]:
  Draws the terrain (e.g. mountain chains) on the map with the selected fineness.
  [**Off**]:
  Does not draw the terrain on the map.

## Map Settings

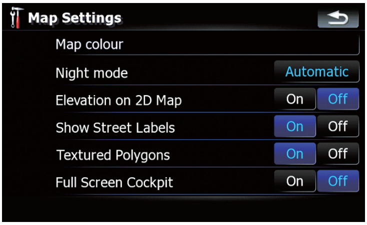
The general settings related with a map screen can be customised.

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [Map Settings].

The “**Map Settings**” screen appears.



Map Settings

Map colour
Night mode Automatic
Elevation on 2D Map On [✓ Off]
Show Street Labels [✓ On] Off
Textured Polygons [✓ On] Off
Full Screen Cockpit On [✓ Off]

Available options;

- [**Map colour**]
  Enables you to define the map colour for daytime and nighttime use. Touch this key to show the next screen.
  “**Daylight colour profile:**”
  The daytime map colour can be set. Touch the key and select the desired profile from the list.
  “**Night colour profile:**”
  The nighttime map colour can be set. Touch the key and select the desired profile from the list.
- “**Night mode**”
  Changes the settings for the nighttime map.
  [**Automatic**]:
  Switches the map colour defined on “**Map colour**” automatically between daytime and nighttime.
  [**Night**]:
  Always displays the map in the colour defined on “**Night colour profile:**”.
  [**Day**]:
  Always displays the map in the colour defined on “**Daylight colour profile:**”.
- “**Elevation on 2D Map**”
  You can select whether to draws or refrain from drawing the terrain with a realistic landscape on the map, such as a green space, water place, undulating surface.

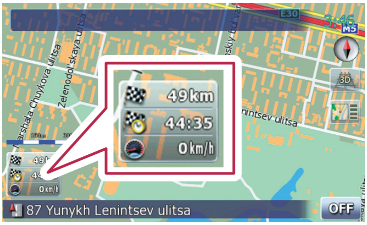
- “**Show Street Labels**”
  Shows or hides the street names and city names.
- “**Textured Polygons**”
  You can select whether to draws or refrain from drawing the map more graphically.
- “**Full Screen Cockpit**”
  Shows-hides the “**Multi-Info window**” and “Second manoeuvre arrow”.

## Displayed Info

Allows you to select what options you want to display on each part of the “**Multi-Info window**”.

❒ The estimated time of arrival is an ideal value that the navigation system computes internally as the route is calculated. The estimated time of arrival should be read just as a reference value, and does not guarantee arrival at the time indicated.

A method for changing the value of **Top field:** is described here along with an operational example.



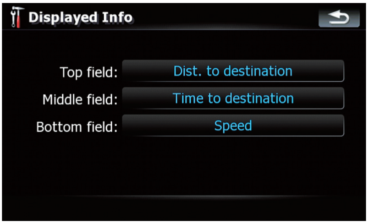
### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [Displayed Info].

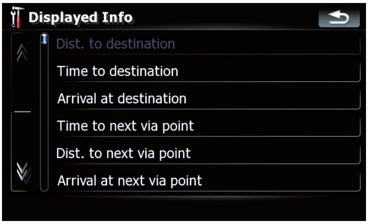
The “**Displayed Info**” screen appears.

### 3 Touch the key on the right of “Top field:” to display the options.


Displayed Info

Top field: Dist. to destination
Middle field: Time to destination
Bottom field: Speed

### 4 Touch your desired option.


Displayed Info

Dist. to destination
Time to destination
Arrival at destination
Time to next via point
Dist. to next via point
Arrival at next via point

## Smart Zoom

Enables the navigation system to zoom in automatically when you approach a guidance point and zoom out after you pass through it. You can setup the behaviour while “**Smart Zoom**” is activated.

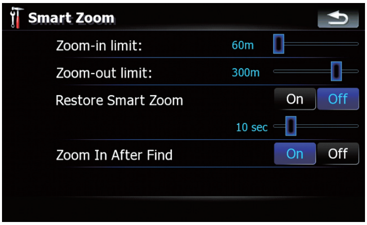
❒ When the route is not set, the navigation system will simply zoom in or out depending on your speed.

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [On] or [Off] to activate or deactivate “Smart Zoom”.

Touching 🔧 allows you to enter the detailed setting screen only when [**On**] has been selected.


Smart Zoom

Zoom-in limit: 60m

Zoom-out limit: 300m

Restore Smart Zoom: On [✓ Off]

10 sec

Zoom In After Find: [✓ On] Off

Available options;

- “**Zoom-in limit:**”
  Allows you to set the limit for zoom-in behaviour.
- “**Zoom-out limit:**”
  Allows you to set the limit for zoom-out behaviour.
- “**Restore Smart Zoom**”
  Allows you to set whether “**Smart Zoom**” is to be reactivated after changing the map scale, tilt, or rotation.
  Also, enables you to set how soon “**Smart Zoom**” interval will be reactivated after completion of the operations described previously.
- “**Zoom In After Find**”
  Shows the “Map Confirmation Screen” with the preset map scale after you have searched for a position using one of the methods on the “**Destination Menu**”.

## Overview Mode

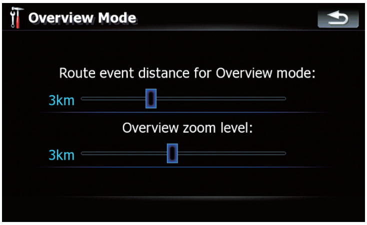
Enables the navigation system to zoom out automatically up to the selected map scale when the next guidance point is distant.

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [On] or [Off] to activate or deactivate “Overview Mode”.

Touching 🔧 allows you to enter the detailed setting screen only when [**On**] has been selected.


Overview Mode

Route event distance for Overview mode: 3km

Overview zoom level: 3km

Available options;

- “**Route event distance for Overview mode:**”
  Allows you to set a distance to activate “**Overview Mode**”. The map starts zooming out when the distance to the next guidance point is further than the distance set here.
- “**Overview zoom level:**”
  Allows you to set the map scale for zoom-out behaviour in “**Overview Mode**”.

## Manage POI

➲ For more details concerning the operation, refer to *Setting the POI appearance* on page 116.

## Manage Track Logs

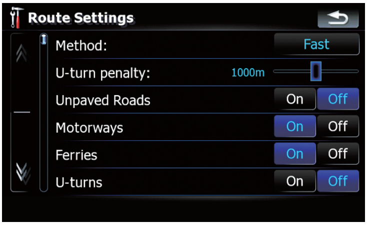
➲ For more details concerning the operation, refer to *Recording your travel history* on page 118.

## Route

The settings related to route calculation can be customised.

### ● Touch [Route] on the “Navi Settings” menu.

The “**Route Settings**” screen appears.



Available options;

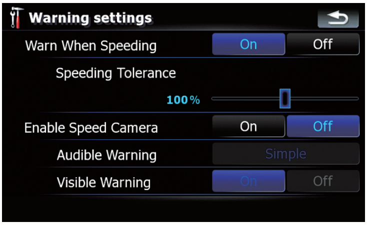
- "**Method:**"
  Determines which condition takes priority for route calculation.
  [**Fast**]:
  Calculates a route with the shortest travel time to your destination as a priority.
  [**Short**]:
  Calculates a route with the shortest distance to your destination as a priority.
  [**Easy**]:
  Calculates a route to your destination with the fewest turning points possible as a priority.
  [**Economical**]:
  Calculates a route on the basis of least fuel consumption.
- "**U-turn penalty:**"
  Allows you to limit the distance increase for U-turns.
- "**Unpaved Roads**"
  [**On**]:
  Calculates a route without avoidance of unpaved roads.
  [**Off**]:
  Calculates a route with avoidance of unpaved roads to the extent possible.
- "**Motorways**"
  [**On**]:
  Calculates a route without avoidance of motorways.
  [**Off**]:
  Calculates a route with avoidance of motorways to the extent possible.
- "**Ferries**"
  [**On**]:
  Calculates a route without avoidance of ferries.
  [**Off**]:
  Calculates a route with avoidance of ferries to the extent possible.
- "**U-turns**"
  [**On**]:
  Calculates a route without avoidance of U-turns.
  [**Off**]:
  Calculates a route with avoidance of U-turns to the extent possible.
  ❒ Turning back on divided highway is not considered a U-turn.
- "**Permit Needed**"
  [**On**]:
  Calculates the route without taking into account roads and areas where permission is needed for entry.
  [**Off**]:
  Calculates the route taking into account the roads and areas where permission is needed for entry.
- "**Toll Roads**"
  [**On**]:
  Calculates a route without avoidance of toll roads areas.
  [**Off**]:
  Calculates a route with avoidance of toll roads areas to the extent possible.

## Warnings

The settings related to warning operations can be customised.

● **Touch [Warnings] on the "Navi Settings" menu.**

The "**Warning settings**" screen appears.



**Warning settings**

Warn When Speeding On Off

Speeding Tolerance 100 %

Enable Speed Camera On Off

Audible Warning Simple

Visible Warning On Off

Available options;

- “**Warn When Speeding**”
  Establishes whether or not to enable the excessive speed warnings for when you exceed the speed limit.

  **CAUTION**
  The speed limit is based on the map database. The speed limit in the database may not match the actual speed limit of the current road. This is not a definite value. Be sure to drive according to the actual speed limit.

  - “**Speeding Tolerance**”
    Sets the tolerance for the speed limit with a percentage.

- “**Enable Speed Camera**”
  Establishes whether or not to enable the road safety camera warnings when you approach a safety camera location.

  **CAUTION**
  - In some countries the use of systems that give drivers advance warning of safety cameras (which includes speed cameras and other type of cameras meant for traffic control) is prohibited. Therefore Pioneer strongly advices you to check:
    —your local legislation and to use warning function for safety cameras only if this is allowed.
    —when travelling abroad please make check in advance that the “speed warning system” in the countries you are driving in is allowed.
  - Pioneer is no liable for any damage resulting from your use of warning function for safety cameras on this navigation system.

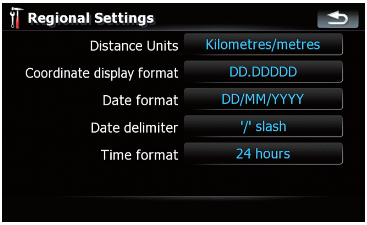
  - “**Audible Warning**”
    [**Simple**]:
    This warning is given only if you exceed the speed limit when approaching a camera location.
    [**When Approaching**]:
    Warns repeatedly as you approach a camera location.
    [**Disabled**]:
    Deactivates the warning operations.
  - “**Visible Warning**”
    Establishes whether or not to enable the safety camera icons on the map.

## Regional Settings

The display format for the distance unit, latitude and longitude, and other settings related to time and date can be customised.

● **Touch [Regional Settings] on the “Navi Settings” menu.**

The “**Regional Settings**” screen appears.



**Regional Settings**

Distance Units Kilometres/metres

Coordinate display format DD.DDDDD

Date format DD/MM/YYYY

Date delimiter '/' slash

Time format 24 hours

Available options;

- “**Distance Units**”
  Controls the unit of distance and speed shown.
- “**Coordinate display format**”
  Controls the format of latitude and longitude shown.
- “**Date format**”
  Controls the format of date shown.
- “**Date delimiter**”

Controls the delimiter format for the date shown.

- "**Time format**"
  Controls the time format shown.

## Restore Factory Settings

Resets various settings registered to the navigation system and restores them to the default or factory settings.

❒ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.
  ➲ For more detailed information about the items to be deleted, refer to *Returning the navigation system to the default or factory settings* on page 133.

### 1 Touch [Restore Factory Settings] on the "Navi Settings" menu.

### 2 Touch [Yes].

The navigation system will now restart.

## Set Home

➲ For more details concerning the operation, refer to *Setting your home position* on page 119.

## Demo Mode

This is a demonstration function for retail stores. After a route is set, touching this key to start the simulation of the route guidance.

### 1 Touch [Demo Mode] on the "Navi Settings" menu.

### 2 The demonstration guidance will begin.

❒ If you want to perform the simulation at faster speed, touch [**Fly over**] on the "**Route Information**" screen.

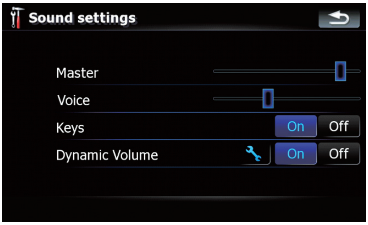
➲ For more details concerning the operation, refer to *Playing simulated travel at high speed* on page 43.

## Sound settings

All settings here are effective only for the navigation guidance and beep.

### ● Touch [Sound settings] on the "Navi Settings" menu.

The "**Sound settings**" menu appears.



Sound settings

Master

Voice

Keys On Off

Dynamic Volume On Off

Available options;

- "**Master**"
  Controls the master volume of both the navigation guidance and beep.
- "**Voice**"
  Controls the volume of the navigation guidance.
- "**Keys**"
  Controls the beep tone volume.
- "**Dynamic Volume**"
  Increases and decreases the master volume of the navigation guidance and beep automatically according to the current speed. This function is very helpful when you are driving at high speed and there is too much noisy to hear the guidance instructions and beep.
  Touching 🔧 allows you to enter the detailed setting screen only when [**On**] has been selected.
  "**Minimum speed:**"
  Enables the navigation system to automatically start turning the volume up as the current speed reaches the value set here.
  "**Maximum speed:**"
  Enables the navigation system to automatically maximise the volume when the current speed reaches the value set here.

## About

Enables you to check the copyright and other information about the map database.

### 1 Touch [About].

Copyright information of the database is displayed.

### 2 Touch [Maps].

Touching [**Maps**] allows you to view the information regarding the map database in detail. After that, touching the desired item on the list allows you to view more detailed information about the selected map database.

## Setting the POI appearance

You can display or hide the POI (points of interest) icons on the map. To avoid the screen becoming crowded with POI icons, all the icons have been made invisible as a default setting. You can set the conditions for each category here and also create new categories.

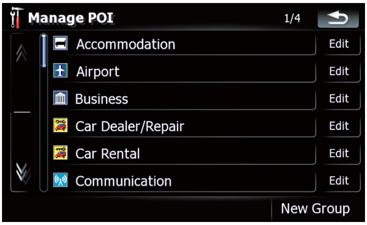
❒ If the custom POI is found on an external storage device (USB, SD), the navigation system will show a POI list which includes them.

### 1 Touch [Visual] on the "Navi Settings" menu.

The "**Visual Settings**" screen appears.

### 2 Touch [Manage POI].

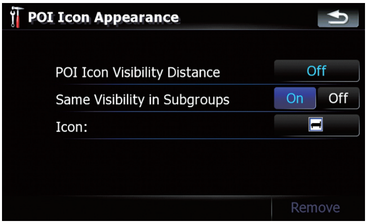
### 3 Touch the desired category that you want to display.


Manage POI
1/4
Accommodation
Edit
Airport
Edit
Business
Edit
Car Dealer/Repair
Edit
Car Rental
Edit
Communication
Edit
New Group

If there are more detailed categories within the selected category, repeat this step as many times as necessary.
If there aren't anymore detailed categories, a blank list appears. In this case, you can only create the new category by touching [**New Group**].

### 4 Touch [Edit] on the right of the desired sub-category to set the appearance.

### 5 Touch the desired key to customise it.


POI Icon Appearance
POI Icon Visibility Distance
Off
Same Visibility in Subgroups
On
Off
Icon:
Remove

Available options;

- "**POI Icon Visibility Distance**"
  Touching the key shows the option. Touch one of them to set the desired visibility.
  When "**Satellite**" is selected, the POI icons will appear even though they are far away from your current position. When "**Close**" is selected, only the nearest POI icons will appear. Selecting "**Off**" hides the POI icons of this category.
- "**Same Visibility in Subgroups**"
  [**On**]:
  Also applies this visibility to all sub-categories belonging to this category.
  [**Off**]:
  Does not apply this visibility to all sub-categories belonging to this category.
- "**Icon:**"
  Touching the key shows the options available. Touch one of them to set the desired icon.
- [**Remove**]:
  Touching the key allows you to delete the selected category.

- ❒ [**Remove**] is available only for POI categories that are created on this navigation system.

## Creating new categories

If your customised POI does not match any pre-installed categories, creating a new category allows you to edit your customised POI so that it can belong to this newly-created category.

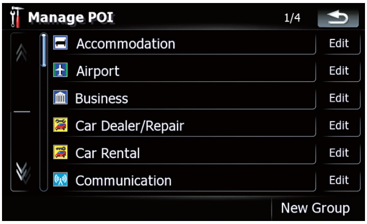
- ❒ If the custom POI is found on an external storage device (USB, SD), the navigation system will show a POI list which includes them.

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [Manage POI].

### 3 Touch the desired category.

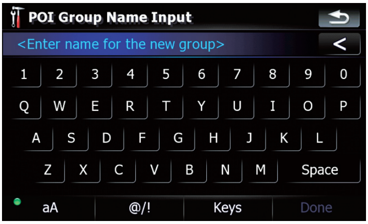

Manage POI
1/4
Accommodation
Edit
Airport
Edit
Business
Edit
Car Dealer/Repair
Edit
Car Rental
Edit
Communication
Edit
New Group

If there are more detailed categories within the selected category, repeat this step as many times as necessary.

If there aren’t anymore detailed categories, a blank list appears. In this case, touching [**New Group**] allows you to create a new category.

### 4 Touch [New Group] at the screen where you want to create a new category.

### 5 Enter the category name and touch [Done] to complete the entry.


POI Group Name Input
<Enter name for the new group>
<
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M Space
aA
@/!
Keys
Done

## Editing your customised POI

If you have already stored the customised POI, you can edit the POI property.

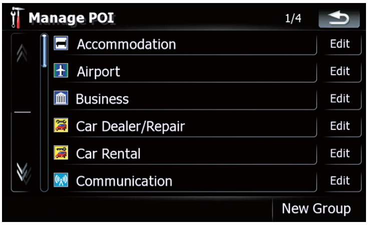
- ❒ If the custom POI is found on an external storage device (USB, SD), the navigation system will show a POI list which includes them.

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [Manage POI].

### 3 Touch the desired category for editing.

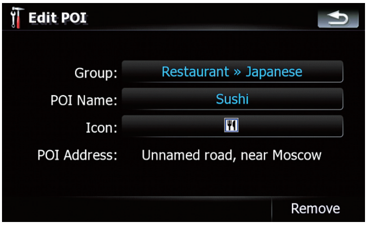

Manage POI
1/4
Accommodation
Edit
Airport
Edit
Business
Edit
Car Dealer/Repair
Edit
Car Rental
Edit
Communication
Edit
New Group

If there are more detailed categories within the selected category, repeat this step until the desired POI appears.

### 4 Touch the desired POI.

The “**Edit POI**” screen appears.

### 5 Touch the desired key to customise it.



Group: Restaurant » Japanese
POI Name: Sushi
Icon:
POI Address: Unnamed road, near Moscow

Available options;

- “**Group:**”
  The category that the item currently selected belongs to can be changed. Touching the key shows the options available. Touch one of them to set the desired category.
- “**POI Name:**”
  Touching the key displays the screen for entering a new POI name. Enter the name and then touch [**Done**] to complete the entry.
- “**Icon:**”
  Touching the key shows the options available. Touch one of them to set the desired icon.
- [**Remove**]:
  Touching the key allows you to delete the selected POI.

❐ [**Remove**] is available only for POIs that are created on this navigation system.

❐ The POI address is not editable.

## Recording your travel history

Activating the track logger enables you to record your driving history (hereinafter called “track log”). You can review the travel history later and replay the travel for your reference.

### Activating track logger temporarily

One-time activation is useful if you want to create a log only for that trip.

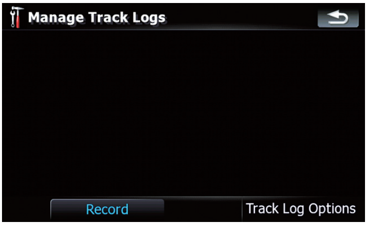
### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

### 2 Touch [Manage Track Logs].

A list of track logs already recorded appears. A blank list appears if you have not recorded it yet.

### 3 Touch [Record] to activate the track logger.



The key then changes to [**Stop Recording**]. Touching [**Stop Recording**] allows you to deactivate the track logger.

❐ If there is not enough space in the built-in memory, the oldest track log will be overwritten by the new one.

❐ If you want to permanently activate the track logger whenever the GPS signal is available, switch “**Enable Auto-saving**” to “**On**”.

➲ For details, refer to *Setting the track logger options* on the next page.

### Browsing and replaying the track log

### 1 Touch [Visual] on the “Navi Settings” menu.

The “**Visual Settings**” screen appears.

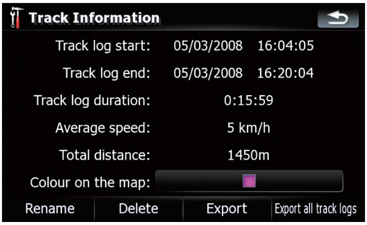
### 2 Touch [Manage Track Logs].

A list of track logs already recorded appears. Touching ▶ enables you to replay the track log with “**Fly over**”.

### 3 Touch the desired track log on the list.

More details about the track log appears.

4 **Touch the desired key to operate it.**


**Track Information**

Track log start: 05/03/2008 16:04:05

Track log end: 05/03/2008 16:20:04

Track log duration: 0:15:59

Average speed: 5 km/h

Total distance: 1450m

Colour on the map: ■

Available options;

- [**Rename**]:
  Touching this key displays the screen for entering a new name for the track log. Enter the name and then touch [**Done**] to complete the entry.
- [**Delete**]:
  Touching this key deletes the track log.
- [**Export**]:
  Touching this key exports the track log currently selected to the external storage device (USB or SD).
- [**Export all track logs**]:
  Touching this key exports all track logs currently stored to the external storage device (USB or SD) at once.
- **The key next to "Colour on the map:"**:
  Touching this key displays the screen for changing the colour used for the route highlighting of the track log. Touch the desired colour on the colour list. The colour of track logs is assigned automatically within predefined colours when this setting is established.

## Setting the track logger options

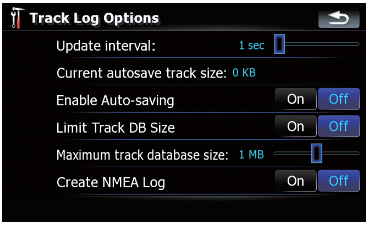
1 **Touch [Visual] on the "Navi Settings" menu.**

The "**Visual Settings**" screen appears.

2 **Touch [Manage Track Logs].**

3 **Touch [Track Log Options].**

4 **Touch the desired key to operate it.**


**Track Log Options**

Update interval: 1 sec

Current autosave track size: 0 KB

Enable Auto-saving On Off

Limit Track DB Size On Off

Maximum track database size: 1 MB

Create NMEA Log On Off

Available options;

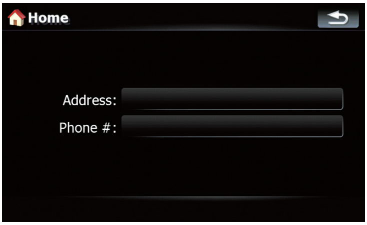
- "**Update interval:**"
  Sets how often the system updates the log.
- "**Current autosave track size:**"
  Sets a size limit on automatic logging. This setting will be effective only when "**Enable Auto-saving**" is "**On**".
- "**Enable Auto-saving**"
  Sets whether the automatic logging is activated or not.
- "**Limit Track DB Size**"
  Limits the total data size for logging.
- "**Maximum track database size:**"
  Sets a size limit on logging. This parameter can be adjustable only when "**Limit Track DB Size**" is "**On**".
- "**Create NMEA Log**"
  Creates the log files in the SD memory card. When this setting is "**On**", the system outputs the log files with NMEA-0183 format onto the SD memory card.

## Setting your home position

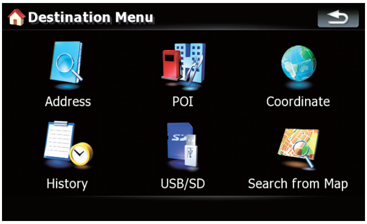
Registering your home position saves time and effort. Also, routes to home positions can be calculated easily with a single touch of the key from the "**Destination Menu**". The registered home position can also be modified later.

1 **Touch [Set Home] on the "Navi Settings" menu.**

**2 Touch the key next to “Address:”.**


Home
Address:
Phone #:

**3 Perform one of the search methods and locate the cursor on your desired position.**


Destination Menu
Address
POI
Coordinate
History
USB/SD
Search from Map

**4 Touch [OK].**

**5 Touch the key next to “Phone #”.**

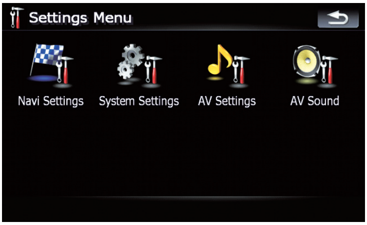
**6 Enter your home phone number, then touch [Done].** ■

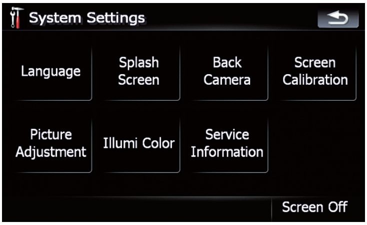
# The options on the “System Settings” menu

## Displaying the “System Settings” menu

**1 Press MENU button to display the “Top Menu”, and then touch [Settings].**

**2 Touch [System Settings].**
The “**System Settings**” menu appears.


Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound

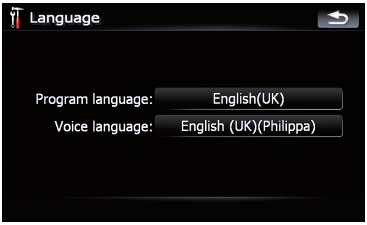

System Settings
Language
Splash Screen
Back Camera
Screen Calibration
Picture Adjustment
Illumi Color
Service Information
Screen Off

## Selecting the language

You can set the languages used on the programme and voice guidance. Each language can be set separately.

**1 Touch [Language] on the “System Settings” menu.**
- ➲ For details, refer to *Displaying the “***System Settings***” menu* on this page.

**2 Touch the key next to “Voice language:”.**



Program language: English(UK)
Voice language: English (UK)(Philippa)

The language list is displayed.

**3 Touch the desired language.**

After the language is selected, the screen returns to the previous screen.

**4 Touch the key next to "Program language:".**

**5 Touch the desired language.**

If you change [**Program language:**], a message prompting you to reboot appears. Touch [**OK**] reboots the system.

## Changing the splash screen

You can change the splash screen that appears when the navigation system starts. Copy your favourite image to the external storage device (USB, SD), and select the image to import.

❒ Splash screen images should be used within the following formats;
  — BMP or JPEG files
  — Allowable horizontal and vertical size are 2 592 x 1 944 or smaller
  — Allowable data size is 15 MB or smaller

❒ Proper compatibility with allowable files is not guaranteed.

❒ Imported original images will be stored in the built-in memory, but the ability to save these images cannot be guaranteed completely. If your original image data is deleted, set the external storage device (USB, SD) again and re-import the original image.

**1 Create a folder named "Pictures" on the top-most directory of the external storage device (USB, SD) and store the picture files in this folder.**

**2 Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.**

**3 Touch [Splash Screen] on the "System Settings" menu.**

➲ For details, refer to *Displaying the "***System Settings***" menu* on the previous page.

The navigation system checks the external storage device (USB, SD). If an appropriate file is found, the file list will be displayed.

❒ If there is no "**Pictures**" folder or loadable file, a message appears.

❒ You can switch the list by touching [**Import from SD**] and [**Import from USB**].

**4 Touch the image to use as the splash screen from the list.**

The image is displayed on the screen.

**5 Touch [OK].**

The image is set as the splash screen, and the system returns to the "**System Settings**" menu.

## Setting the rear view camera

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND-BC2). (For details, consult your dealer.)

### Back up camera

The navigation system features a function that automatically switches to the full-screen rear camera image installed on your vehicle. When the gearstick is in the REVERSE (R) position, the screen automatically switches to full-screen rear view camera.

### Camera for "RearView"

[**RearView**] can be displayed the full-screen rear camera image any time without relation to the gearstick position after touching [**RearView**] on the "**AV Source**" menu. [**RearView**] is useful if you want to monitor an attached trailer, etc.

**⚠ CAUTION**

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.

❒ Immediately verify whether the display changes to a rear view camera image when the gearstick is moved to REVERSE (R) from another position.

❒ When the whole screen changes to a rear view camera image during normal driving, switch to another setting.

❒ Initially, this function is set to "**Off**".

### 1 Touch [Back Camera] on the "System Settings" menu.

➲ For details, refer to *Displaying the "***System Settings***" menu* on page 120.

The "**Camera Input**" screen appears.

### 2 Touch [On] next to "Camera" to activate the camera setting.

❒ Unless this setting is [**On**], you cannot switch to "**RearView**".

### 3 Touch [Battery] or [GND] next to "Polarity" to select the appropriate polarity setting.

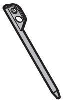
- **Battery** — When the polarity of the connected lead is positive while the gearstick is in the REVERSE (R) position
- **GND** — When the polarity of the connected lead is negative while the gearstick is in the REVERSE (R) position

## Adjusting the response positions of the touch panels (touch panel calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel screen.

❒ Make sure to use the supplied stylus for adjustment and gently touch the screen. If you press the touch panel forcefully, the touch panel may be damaged. Do not use a sharp pointed tool such as a ballpoint pen or a mechanical pen. Otherwise the screen may become damaged.

### Stylus (supplied with the navigation system)

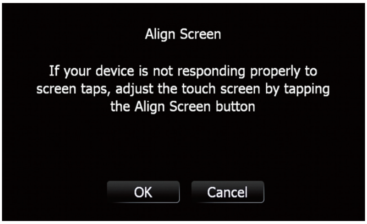


### 1 Touch [Screen Calibration] on the "System Settings" menu.

A message confirming whether to start the calibration appears.

❒ You can also start the calibration by keep pressing **MENU** button on the "**Top Menu**".

### 2 Touch [OK].



Align Screen

If your device is not responding properly to screen taps, adjust the touch screen by tapping the Align Screen button

### 3 With the stylus, touch and hold the arrows that point to the centre and corners of the LCD screen.

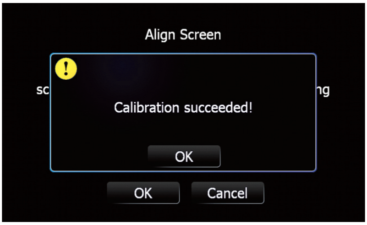
The arrow indicates the order.

### 4 Touch anywhere on the screen.

The adjusted position data will be saved.

❒ Do not turn off the engine while saving the adjusted position data.

### 5 Touch [OK].



Align Screen

Calibration succeeded!

## Adjusting the screen brightness

“**Brightness**” modifies the black level of the screen.

**1 Touch [Picture Adjustment] on the “System Settings” menu.**

➲ For details, refer to *Displaying the “***System Settings***” menu* on page 120.

**2 Touch [+] or [-] to adjust the brightness.**

Each time you touch [**+**] or [**-**] increases or decreases the level. **10** to **00** is displayed as the level is increased or decreased.

**3 Touch ↩ to return to the previous screen.**

❒ You can also start the adjustment by keep pressing **MAP** button.

## Setting the illumination colour

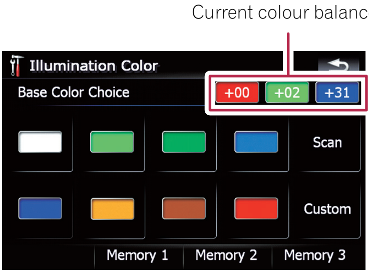
The illumination colour can be selected from 11 different colours. Furthermore, the illumination colour can switched between these 11 colours in order.

### Selecting the colour from the preset colours

**1 Touch [Illumi Color] on the “System Settings” menu.**

➲ For details, refer to *Displaying the “***System Settings***” menu* on page 120.

**2 Touch desired colour.**



Available options;

- Coloured keys — Selects the desired preset colour
- **Memory 1**/**Memory 2**/**Memory 3** — Colours registered in the memory
  ➲ For details, refer to *Creating a favourite colour and storing it to memory* on this page.
- **Scan** — Shifts between the eight default colours in sequence gradually.

### Creating a favourite colour and storing it to memory

You can create a favourite colour and set it as the illumination colour.

**1 Touch [Illumi Color] on the “System Settings” menu.**

➲ For details, refer to *Displaying the “***System Settings***” menu* on page 120.

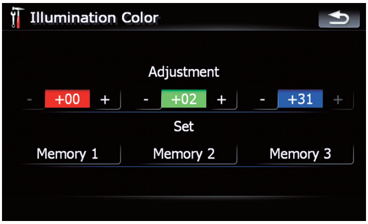
**2 Touch [Custom].**

❒ If [**Scan**] is set, [**Custom**] cannot be selected.

**3 Touch [+] or [-] to adjust the values for Red, Green and Blue to create a favourite colour.**

Watch the illumination of hardware keys while adjusting the colour.

Each time you touch [**+**] or [**-**] increases or decreases the value of selected item. **+31** to **+00** is displayed as the value is increased or decreased.



❒ An entry cannot be stored with all of the values set to “**+00**”.

**4 Touch [Memory 1], [Memory 2] or [Memory 3] to store the illumination colour.**

**5 Touch to return to the previous screen.**

## Checking the version information

**1 Touch [Service Information] on the “System Settings” menu.**

- ➲ For details, refer to *Displaying the “***System Settings***” menu* on page 120.

**2 Check the version information.**

## Turning off the screen

By turning off the backlight of the LCD screen, you can turn off the screen display without turning off the voice guidance.

- **Touch [Screen Off] on the “System Settings” menu.**
  - ➲ For details, refer to *Displaying the “***System Settings***” menu* on page 120.

The screen is turned off.

- ❒ To turn on the screen, touch anywhere on the screen. ■

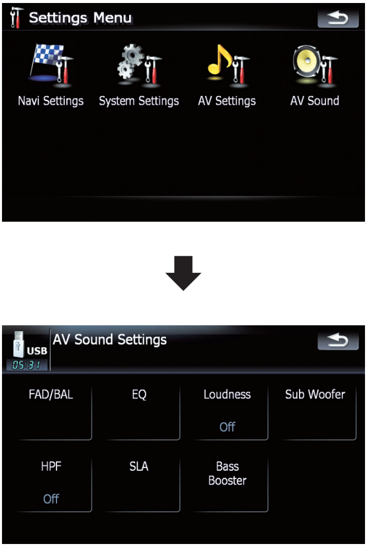
# The “AV Sound” menu options

## Displaying the “AV Sound” menu

**1 Press MENU button to display the “Top Menu”, and then touch [Settings].**

**2 Touch [AV Sound].**

The “**AV Sound**” menu appears.



- ❒ When AV source is “**OFF**”, you cannot perform adjustments.
- ❒ When selecting the FM tuner as the AV source, you cannot select [**SLA**].

## Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

**1 Touch [FAD/BAL] on the “AV Sound” menu.**

- ➲ For details, refer to *Displaying the “***AV Sound***” menu* on this page.

When the rear output setting is [**Rear SP**] [**Sub W**], [**Balance**] will be displayed instead of [**FAD/BAL**].

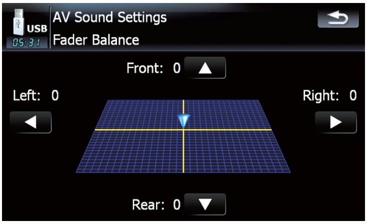
- ➲ Refer to *Setting the rear output* on page 130.

**2 Touch [▲] or [▼] to adjust front/rear speaker balance.**

Each time you touch [▲] or [▼], the front/rear speaker balance moves towards the front or the rear.

"**Front:15**" to "**Rear:15**" is displayed as the front/rear speaker balance moves from front to rear.
Setting "**Front:**" and "**Rear:**" to "**0**" is proper if two speaker system being used.
When the rear output setting is [**Rear SP Sub W**], you cannot adjust front/rear speaker balance.
- ➲ Refer to *Setting the rear output* on page 130.

**3 Touch [◀] or [▶] to adjust left/right speaker balance.**
Each time you touch [◀] or [▶], the left/right speaker balance moves towards the left or the right.



**Left:15** to **Right:15** is displayed as the left/right speaker balance moves from left to right.

## Using the equaliser

The equaliser lets you adjust equalisation to match vehicle interior acoustic characteristics as desired.

### Recalling equaliser curves

There are seven stored equaliser curves that you can easily recall at any time. Here is a list of the equaliser curves:

| Equaliser curve |
|---|
| **S.Bass**<br>**S.Bass** is a curve in which only low-pitched sound is boosted. |
| **Powerful**<br>**Powerful** is a curve in which low-pitched and high-pitched sounds are boosted. |
| **Natural**<br>**Natural** is a curve in which low-pitched and high-pitched sounds are slightly boosted. |
| **Vocal**<br>**Vocal** is a curve in which the midrange, which is the human vocal range, is boosted. |
| **Flat**<br>**Flat** is a flat curve in which nothing is boosted. |
| **Custom1**<br>**Custom1** is an adjusted equaliser curve that you create. A separate custom curve can be created for each source. |
| **Custom2**<br>**Custom2** is an adjusted equaliser curve that you create. If you select this curve, the effect is reflected all AV source. |

**1 Touch [EQ] on the "AV Sound" menu.**
- ➲ For details, refer to *Displaying the "***AV Sound***" menu* on the previous page.

**2 Touch desired equaliser.**
- ❒ You can also sequentially select the desired equaliser curve by touching [**EQ**] on the AV operation screen of each source.

### Adjusting the equaliser curves

You can adjust the currently selected equaliser curve setting as desired. Adjustments can be made with a 3-band parametric equaliser.

#### The difference between "Custom1" and "Custom2"

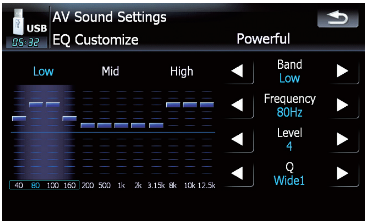
- A separate **Custom1** curve can be created for each source. If you make adjustments when a curve **S.Bass**, **Powerful**, **Natural**, **Vocal**, **Flat**, or **Custom1** is selected, the equaliser curve settings will be memorised in **Custom1**.
- A **Custom2** curve can be created common to all sources. If you make adjustments when **Custom2** curve is selected, the **Custom2** curve will be updated.
- The adjusted **Custom1** curve is memorised for each of the source selected, but one curve is shared for the following sources.
  — **CD**, **ROM**, **DVD-V**, **DVD-VR**, **DivX**

— **AV1** and **AV2**
— **EXT1** and **EXT2**

- The different source volume level can be set between **iPod** and **USB**.
- When [**Flat**] is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equaliser curves by switching alternatively between [**Flat**] and a set equaliser curve.

### Adjustable parameters

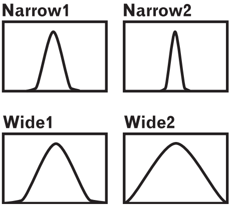
You can adjust the centre frequency, level and the Q factor (curve characteristics) of each currently selected curve band (**Low**/**Mid**/**High**).



AV Sound Settings
EQ Customize
Powerful

Band Low
Frequency 80Hz
Level 4
Q Wide1

- **Band**:
  You can select the equaliser band.
- **Frequency**:
  You can select which frequency to be set as the centre frequency.
- **Level**:
  You can select the decibel (dB) level of the selected EQ.
- **Q**:
  You can select the details of the curve characteristics. (The following figure shows the characteristic image.)



### 1 Touch [EQ] on the “AV Sound” menu.

➲ For details, refer to *Displaying the “***AV Sound***” menu* on page 124.

### 2 Touch the one of keys to select a curve that you want to use as the basis of customising.

### 3 Touch [Customize].

### 4 Touch [◀] or [▶] to select the equaliser band to adjust.

Each time you touch [◀] or [▶] selects equaliser bands in the following order:

**Low** — **Mid** — **High**

### 5 Touch [◀] or [▶] to select the desired frequency.

Touch [◀] or [▶] until the desired frequency appears in the display.

**Low**: **40 Hz** — **80 Hz** — **100 Hz** — **160 Hz**
**Mid**: **200 Hz** — **500 Hz** — **1 kHz** — **2 kHz**
**High**: **3.15 kHz** — **8 kHz** — **10 kHz** — **12.5 kHz**

### 6 Touch [◀] or [▶] to adjust the level of the equaliser band.

Each time you touch [◀] or [▶], the level of the equalisation band increases or decreases.

**+6** to **-6** is displayed as the level is increased or decreased.

### 7 Touch [◀] or [▶] to select the desired Q factor.

Touch [◀] or [▶] until the desired Q factor appears in the display.

**Wide2** — **Wide1** — **Narrow1** — **Narrow2**

## Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

### 1 Touch [Loudness] on the “AV Sound” menu.

➲ For details, refer to *Displaying the “***AV Sound***” menu* on page 124.

### 2 Touch [Loudness] to select a desired level.

Each time you touch [**Loudness**], the level is selected in the following order:

**Off** — **Low** — **Mid** — **High**

## Using subwoofer output

The navigation system is equipped with a subwoofer output mechanism, which can be turned on or off.

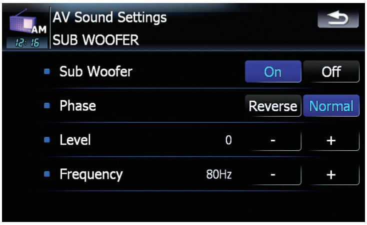
❒ Only when "**Sub Woofer**" is [**On**], you can adjust "**Phase**", "**Level**" and "**Frequency**".

### 1 Touch [Sub Woofer] on the "AV Sound" menu.

➲ For details, refer to *Displaying the* "**AV Sound**" *menu* on page 124.

### 2 Touch [On] to turn subwoofer output on.

To turn subwoofer output off, touch [**Off**].



AV Sound Settings
SUB WOOFER

Sub Woofer: On
Phase: Normal
Level: 0
Frequency: 80Hz

### 3 Touch [Reverse] or [Normal] to select the phase of subwoofer output.

### 4 Touch [+] or [-] next to "Level" to adjust the output level.

**+6** to **-24** is displayed as the level is increased or decreased.

### 5 Touch [+] or [-] next to "Frequency" to select cut-off frequency.

Each time you touch [**+**] or [**-**], cut-off frequencies are selected in the following order:

**50 Hz** — **63 Hz** — **80 Hz** — **100 Hz** — **125 Hz**

Only frequencies lower than those in the selected range are output from the subwoofer.

## Using the high pass filter

When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, activate **HPF** (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

### 1 Touch [HPF] on the "AV Sound" menu.

➲ For details, refer to *Displaying the* "**AV Sound**" *menu* on page 124.

### 2 Touch [HPF] to select cut-off frequency.

Each time you touch [**HPF**] selects cut-off frequencies in the following order:

**Off** — **50 Hz** — **63 Hz** — **80 Hz** — **100 Hz** — **125 Hz**

## Adjusting source levels

**SLA** (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

❒ Settings are based on the FM tuner volume level, which remains unchanged.

### 1 Compare the FM tuner volume level with the level of the source you wish to adjust.

### 2 Touch [SLA] on the "AV Sound" menu.

➲ For details, refer to *Displaying the* "**AV Sound**" *menu* on page 124.

### 3 Touch [+] or [-] to adjust the source volume.

**+4** to **-4** is displayed as the source volume is increased or decreased.

Following AV sources are set to the same source level adjustment volume automatically.

- **CD**, **ROM**, **DivX**
- **AV1** and **AV2**
- **EXT1** and **EXT2**

❒ The different source volume level can be set between **iPod** and **USB**.

- ❒ For AVIC-F900BT, the source volume level can be set to **DVD-V** and **DVD-VR** respectively as well as differently from the other sources of the built-in DVD drive previously mentioned.

## Enhancing bass (Bass Booster)

The “**Bass Booster**” enhances bass sounds, which can be muted by driving noise.

**1 Touch [Bass Booster] on the “AV Sound” menu.**

➲ For details, refer to *Displaying the “***AV Sound***” menu* on page 124.

**2 Touch [+] or [-] to adjust the range from 0 to 6.** ◼

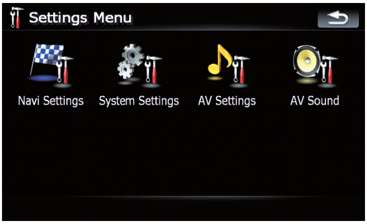
# The options on the “AV Settings” menu

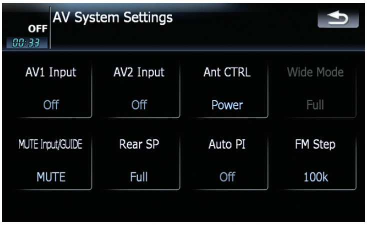
## Displaying the “AV Settings” menu

**1 Press MENU button to display the “Top Menu”, and then touch [Settings].**

**2 Touch [AV Settings].**

The “**AV Settings**” menu appears.


Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound


OFF
00:33
AV System Settings
AV1 Input
Off
AV2 Input
Off
Ant CTRL
Power
Wide Mode
Full
MUTE Input/GUIDE
MUTE
Rear SP
Full
Auto PI
Off
FM Step
100k

- ❒ Only when selecting the AV source with video, you can adjust [**Wide Mode**].
- ❒ Only when the AV source is “**OFF**”, the following items can be adjusted; [**MUTE Input/GUIDE**], [**Rear SP**], [**Auto PI**] and [**FM Step**]

## Setting video input 1 (AV1)

You can switch this setting according to the connected component.

- ❒ This setting is effective for RCA inputs (AUDIO INPUT and VIDEO INPUT) on backside.

● **Touch [AV1 Input] on the “AV Settings” menu.**

➲ For details, refer to *Displaying the “***AV Settings***” menu* on this page.

Each touch of [**AV1 Input**] changes the settings as follows:

- **Off** — No video component is connected
- **iPod** — iPod connected with the USB Interface cable for iPod (CD-IU230V)
- **Video** — External video component
- **EXT** — Pioneer external unit connected with the RCA video cable

## Setting video input 2 (AV2)

You can switch this setting according to the connected component.

- ❒ This setting is effective for mini-jack input on front panel.

● **Touch [AV2 Input] on the "AV Settings" menu.**

➲ For details, refer to *Displaying the "***AV Settings***" menu* on the previous page.

Each touch of [**AV2 Input**] changes the settings as follows:

- **Off** — No video component is connected
- **Video** — External video component

❒ Use **AV2 Input** when connecting CD-RM10 (sold separately) through the external video component.

## Switching the auto aerial setting

If the blue lead of the navigation system is connected to the aerial control terminal of the vehicle, select either of the following settings.

- **Radio** — The aerial extends or turns on only when the audio source is **FM** or **AM**. The aerial is stored or turned off when the AV source is switched to another source.
- **Power** — The aeriel extends or turns on when the ignition switch is turned on. The aeriel is stored or turned off when the ignition switch is turned off.

● **Touch [Ant CTRL] on the "AV Settings" menu.**

➲ For details, refer to *Displaying the "***AV Settings***" menu* on the previous page.

Touching [**Ant CTRL**] switches between [**Radio**] and [**Power**].

❒ Regardless of whether [**Radio**] or [**Power**] is selected, turning off the ignition switch will cause the aeriel to automatically retract or turn off.

## Changing the wide screen mode

● **Touch [Wide Mode] on the "AV Settings" menu.**

➲ For details, refer to *Displaying the "***AV Settings***" menu* on the previous page.

Each touch of [**Wide Mode**] changes the settings as follows:

**Full** — **Normal**

**Full (full)**

A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

**Normal (normal)**

A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as that of the normal picture.

❒ Different settings can be memorised for each video source.

❒ The same setting is automatically applied for the following grouping.

- **SD**, **USB**, **iPod**
- **AV1** and **AV2**
- **EXT1** and **EXT2**

❒ When video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear differently.

❒ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law.

❒ The navigation map and the rear view camera picture is always viewed at **Full**.

## Switching the sound muting/ attenuation

You can select the muting method when the navigation guidance is output. This setting is also effective for a mute signal that has been received from the MUTE lead connected to the navigation system.

❒ When you use a mobile phone connected with Bluetooth technology (dialling, talking, incoming call), the AV source volume is always muted independently of this setting.

● **Touch [MUTE Input/GUIDE] on the "AV Settings" menu.**

➲ For details, refer to *Displaying the "***AV Settings***" menu* on the previous page.

Each touch of [**MUTE Input/GUIDE**] changes the settings as follows:

- **MUTE** — Muting
- **ATT** — Attenuation
- **Normal** — Volume does not change

- ❒ Operation returns to normal when the correspond action is ended.
- ❒ When "**SD**" or "**USB**" selected as the AV source, the AV sounds, the navigation guidance and beep sounds are mixed and the volume can be adjusted simultaneously.

## Setting the rear output

The navigation system's rear output can be used for a full-range speaker or subwoofer connection. If you switch **Rear SP** to **Sub W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp. Initially, the navigation system is set for a rear full-range speaker connection (**Full**).

### 1 Touch [Rear SP] on the "AV Settings" menu.

➲ For details, refer to *Displaying the "***AV Settings***" menu* on page 128.

### 2 Touch [Rear SP] to switch the rear output setting.

When no subwoofer is connected to the rear output, select **Full**.

When a subwoofer is connected to the rear output, select **Sub W**.

- ❒ Both rear speaker leads output and RCA rear output are switched simultaneously in this setting. (When you use the product without RCA rear output, this setting is effective for rear speaker leads only.)

## Switching Auto PI seek

The navigation system can automatically search for a different station with the same programming, even during preset recall.

### ● Touch [Auto PI] on the "AV Settings" menu.

➲ For details, refer to *Displaying the "***AV Settings***" menu* on page 128.

Touching [**Auto PI**] switches between [**On**] and [**Off**].

## Setting the FM tuning step

Normally the FM tuning step employed by seek tuning is 50 kHz. When **AF** or **TA** is on, the tuning step automatically changes to 100 kHz. It may be preferable to set the tuning step to 50 kHz when **AF** is on.

### ● Touch [FM Step] on the "AV Settings" menu.

➲ For details, refer to *Displaying the "***AV Settings***" menu* on page 128.

Each time you touch [**FM Step**] will switch the FM tuning step between 50 kHz and 100 kHz while **AF** or **TA** is on.

- ❒ The tuning step remains at 50 kHz during manual tuning. ◙

## Setting the anti-theft function

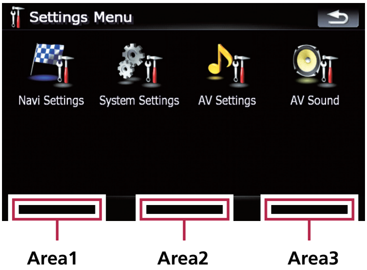
You can set a password for the navigation system. If the back-up lead is cut or **RESET** button is pressed after the password is set, the navigation system prompts for the password at the time of next boot up.

### Setting the password

**1 With the map displayed, press MENU button.**

**2 Touch [Settings] on the “Top Menu”.**

**3 Touch Area1, followed by Area2, and then touch and hold Area3.**



**4 Touch [Set Password].**
The password setting screen appears.

**5 Enter the password you want to set.**
- ❐ Five to sixteen characters can be entered for a password.

**6 Touch [Done].**

**7 Reenter the password to confirm the setting.**

**8 Touch [Done].**
Password-protecting is completed.
- ❐ If you want to change the password currently set, enter the current password and then enter the new one.

### Entering the password

On the password input screen, you must enter the current password. If you enter the incorrect password three times, the screen is locked and operations with using touch panel keys cannot be performed.

**1 Enter the password.**

**2 Touch [Done].**
The message “**Antitheft is being unlocked. Do not switch off during the process.**” appears if you can enter the correct password and the navigation system will be unlocked.

### Deleting the password

The current password can be deleted.

**1 With the map displayed, press MENU button.**

**2 Touch [Settings] on the “Top Menu”.**

**3 Touch Area1, followed by Area2, and then touch and hold Area3.**

**4 Touch [Clear password].**
The password setting screen appears.

**5 Enter the current password.**

**6 Touch [Done].**

**7 Touch [Yes].**
The message for deletion appears and then the current password is deleted.

### Forgotten passwords

Contact the nearest authorised Pioneer Service Station. ■

## Installing the additional file for voice guidance (TTS files)

TTS file is used to read out the street name in the route guidance and notification on arrival short messaging service (SMS) by navigation system. In default, the files for some languages are preinstalled and other languages are not installed. If you want to activate the guidance with TTS for such languages, copy the files from the supplied CD-ROM and import the files into the navigation system via external storage device (USB, SD).

### Preinstalled TTS language files

English (UK), Russian, Français, Deutsch

❐ The maximum four replaceable languages can be stored.

**⚠ CAUTION**

NEVER turn the ignition switch or turn off the power to the navigation system until installation completes. Power-off in the process of installation may cause a failure on the built-in memory.

**1 Create a folder named “TTS” on the top-most directory of the external storage device (USB, SD) and store the TTS files in this folder.**

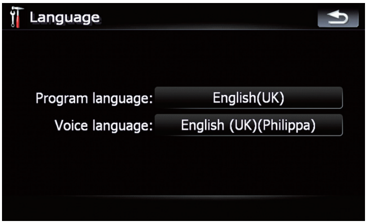
Copy the TTS files of your desired language into this folder from the supplied CD-ROM.

**2 Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.**

**3 Touch [Language] on the “System Settings” menu.**

➲ For details, refer to *Displaying the “***System Settings***” menu* on page 120.

**4 Touch the key next to “Voice language:”.**



Program language: English(UK)

Voice language: English (UK)(Philippa)

The language list is displayed.

**5 Touch [TTS Setup].**

The replaceable languages will appear.

**6 Touch [Add TTS].**

If five replaceable languages are already stored, touch the language to make replacement.

**7 Touch [from SD] or [from USB].**

The screen for file selection appears.

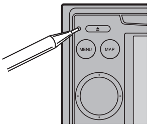
**8 Touch the language that you want to import.** ◘

## Returning the navigation system to the default or factory settings

You can return settings or recorded content to the default or factory settings. There are three methods to clear user data, and the situations and the cleared content are different for each method. For information regarding the content that is cleared by each method, see the list presented later.

### Method 1: Press RESET button

Pressing **RESET** button clears almost all settings of the audio function.



This transforms the system into the same state as when the battery of the vehicle is removed or the yellow lead of the navigation system is disconnected.

➲ For details concerning operations, refer to *Resetting the microprocessor* on page 10.

### Method 2: Restore Factory Settings

Clears some items in the “**Navi Settings**” menu.

➲ For details, refer to **Restore Factory Settings** on page 115.

### Method 3: Reboot the software

Some settings are reset when the software reboots. For example, the settings of [**Program language:**] in “**Language**” is changed.

➲ For details, refer to *Selecting the language* on page 120.

## Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table return to the default or factory settings.

❒ Almost all items not listed below will be retained. However, some items to be returned to the default value are not listed if the setting value can be easily recovered by user, such as the last map scale, the last status of AV operation screen, etc.

— : The setting will be retained.

✓ : The setting will be cleared and returned to the default or factory settings.

| **Navigation functions** | | **Method 1** | **Method 2** | **Method 3** |
|---|---|---|---|---|
| **Navi Settings** | [**Set Home**] | — | — | — |
| | [**GPS & Time Settings**], [**Visual**], [**Route**], [**Warnings**], [**Regional Settings**] | — | ✓ | — |
| | [**Sound settings**]<br>“**Voice**”, “**Keys**”, “**Dynamic Volume** (**On**/**Off**)” | — | ✓ | — |
| | [**Sound settings**]<br>“**Master**”, “**Dynamic Volume**(**Maximum speed:**, **Minimum speed:**)” | — | — | — |
| **System Settings** | [**Language**] | — | ✓ | — |
| | Other settings | — | — | — |

| **Audio functions** | | **Method 1** | **Method 2** | **Method 3** |
|---|---|---|---|---|
| **AV Settings** | [**Wide Mode**] | — | — | — |
| | Other settings | ✓ | — | — |
| **AV Sound** | All settings | ✓ | — | — |
| **CD**, **ROM**, **DVD-V**, **DVD-VR**, **DivX**, **FM**, **AM**, **SD**, **USB** | All settings (*1) | ✓ | — | — |
| Volume setting for AV sources, TA volume | | ✓ | — | — |

(*1) All settings including the setting on the “**Function**” menu are to be deleted.

# Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. While this list is not comprehensive, it should answer your most common problems. If a solution to your problem cannot be found here, contact your dealer or the nearest authorised Pioneer service facility.

### Problems with the navigation screen

| Symptom | Cause | Action (See) |
|---|---|---|
| The power doesn't turn on. The navigation system doesn't operate. | Leads and connectors are incorrectly connected. | Confirm once more that all connections are correct. |
| | The fuse is blown. | Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rate. |
| | Noise and other factors are causing the built-in microprocessor to operate incorrectly. | Press **RESET** button. (Page 10) |
| You cannot position your vehicle on the map without a significant positioning error. | The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Such a loss of signal quality may occur for the following reasons:<br>• The GPS aerial is in an unsuitable location.<br>• Obstacles are blocking signals from the satellites.<br>• The position of satellites relative to your vehicle is inadequate.<br>• Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)<br>• If a vehicle phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily. | Check the GPS signal reception and the position of the GPS aerial if necessary, or continue driving until reception improves. Keep the aerial clear. |
| | Something covers the GPS aerial. | Do not cover the GPS aerial with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals. |
| | Signals from the vehicle's speed pulse are not being picked up properly. | Check that the cables are properly connected. If necessary, consult the dealer that installed the system. |

# Appendix

| | | |
|---|---|---|
| You cannot position your vehicle on the map without a significant positioning error. | The navigation system may not be mounted securely in your vehicle. | Check that the navigation system is securely mounted and, if necessary, consult the dealer that installed the system. |
| | The navigation system is installed with an extreme angle exceeding the installation angle limitations. | Confirm the installation angle. (The navigation system must be installed within the allowed installation angle. For details, refer to "Installation Manual".) |
| | Indication of the position of your vehicle is misaligned after a U-turn or reversing. | Check whether or not the reverse gear signal input lead (violet) is connected properly. (The navigation system works properly without the lead connected, but positioning accuracy will be adversely affected.) |
| The map colour does not switch automatically between daytime and nighttime. | [**Night mode**] is set to [**Day**]. | Check [**Night mode**] setting and make sure [**Automatic**] is selected. (Page 110) |
| | The orange/white lead is not connected. | Check the connection. |
| The screen is too bright. | An improper value has been set on "**Brightness**". | Check the settings. |
| The display is very dim. | [**Night**] is selected in "**Night mode**". | Check the setting of [**Night mode**] and select [**Automatic**] or [**Day**]. (Page 110) |
| | An improper value has been set on "**Brightness**". | Check the settings. |
| No sounds of AV source are produced.<br>The volume level will not rise. | The volume level is low. | Adjust the volume level. |
| | The attenuator or mute is on. | Turn the attenuator or mute off. |
| | A speaker lead is disconnected. | Check the connection. |
| Adjusting the volume of navigation guidance and beeps is not possible. | You cannot adjust these with **MULTI-CONTROL**. | Turn the volume up or down according to [**Sound settings**] on the "**Navi Settings**" menu. (Page 115) |
| The person on the other end of the phone call cannot hear the conversation due to an echo. | The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo. | Use the following methods to reduce the echo:<br>—Lower the volume on the receiver<br>—Have both speakers pause slightly before speaking |
| There's no picture. | The handbrake cord is not connected. | Connect the handbrake cord, and apply the handbrake. |
| | The handbrake is not applied. | Connect the handbrake cord, and apply the handbrake. |
| | The backlight of the LCD panel is turned off. | Turn on the backlight. (Page 124) |
| "Rear display" picture disappears. | The source disc being listened to in the navigation system has been ejected. | Before ejecting the disc, switch the source. This problem may occur when certain connection methods are used. |
| | There is a problem with the "Rear display", for example a faulty wiring connection. | Check the "Rear display" and its connection. |
| | The AV source that cannot output to the rear display is selected. | Select the appropriate AV source. |

| | | |
|---|---|---|
| Nothing is displayed and the touch panel keys cannot be used. | The setting for the rear view camera is incorrect. | Select the appropriate setting for the rear view camera. |
| | The gearstick was placed in [R] when the rear view camera was not connected. | Press **MAP** button, and then press **MENU** button to return to the "**Top Menu**" and then select the correct polarity setting for [**Back Camera**]. (Page 121) |
| There is no response when the touch panel key are touched or a different key responds. | The touch panel keys deviate from the actual positions that respond to your touch for some reason. | Perform the touch panel calibration. (Page 122) |

### Problems in the AV screen

| **Symptom** | **Cause** | **Action (See)** |
|---|---|---|
| CD or DVD playback is not possible. | The disc is inserted upside down. | Insert the disc with the label upward. |
| | The disc is dirty. | Clean disc. |
| | The disc is cracked or otherwise damaged. | Insert a normal, round disc. |
| | The files on the disc are an irregular file format. | Check the file format. |
| | The disc format cannot be played back. | Replace disc. |
| | The loaded disc is a type this system cannot play. | Check what type of disc it is. (For more cautions about handling each type of media, refer to Page 148.) |
| The screen is covered with the caution message and the video cannot be shown. | The handbrake lead is not connected or applied. | Connect the handbrake lead correctly, and apply the handbrake. |
| | The handbrake interlock is activated. | Park your vehicle in a safe place and apply the handbrake. |
| No video output from connected equipments.<br>No video output from connected iPod. | [**AV1 Input**] or [**AV2 Input**] setting is incorrect. | Establish the setting correctly. (Page 105) |
| | The connection of the USB interface cable for iPod is incorrect. | Connect both USB plug and RCA cable side. (If only either connection has made, iPod will not works properly.) (Page 15) |
| The audio or video skips. | The navigation system is not firmly secured. | Secure the navigation system firmly. |
| No sounds are produced.<br>The volume level will not rise. | Cables are not connected correctly. | Connect the cables correctly. |
| | The system is performing still, slow motion, or frame-by-frame playback with DVD-Video. | There is no sound during still, slow motion, or frame-by-frame playback with DVD-Video. |
| | The system is paused or performing, fast reverse or forward during the disc playback. | For the media other than music CD (CD-DA), there is no sound on fast reverse or forward. |
| The icon ⊘ is displayed, and operation is not possible. | The operation is not compatible with the video configuration. | This operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.) |
| The picture stops (pauses) and the navigation system cannot be operated. | The reading of data is impossible during disc playback. | After touching ■ once, start playback once more. |

| | | |
|---|---|---|
| The picture is stretched, the aspect is incorrect. | The aspect setting is incorrect for the display. | Select the appropriate setting for that image. (Page 129, Page 78) |
| A parental lock message is displayed and DVD playback is not possible. | Parental lock is on. | Turn parental lock off or change the level. (Page 78) |
| Parental lock for DVD playback cannot be cancelled. | The code number is incorrect. | Input the correct code number. (Page 78) |
| Playback is not with the audio language and subtitle language settings selected in [**DVD Setup**]. | The DVD playing does not feature dialogue or subtitles in the language selected in [**DVD Setup**]. | Switching to a selected language is not possible if the language selected in [**DVD Setup**] is not recorded on the disc. |
| The picture is extremely unclear/ distorted and dark during playback. | The disc features a signal to prohibit copying. (Some discs may have this.) | Since the navigation system is compatible with the copy guard analogue copy protect system, when playing a disc that has a signal prohibiting copying, the picture may suffer from horizontal stripes or other imperfections when viewed on some displays. This does not mean the navigation system is malfunctioning. |
| Cannot be operated. | The iPod is frozen. | • Reconnect the iPod with the USB interface cable for iPod.<br>• Update the software version of iPod. |
| | An error has occurred. | • Reconnect the iPod with the USB interface cable for iPod.<br>• Park your vehicle in a safe place, and cut off the engine. Turn the ignition key back to “Acc off”. Then start the engine again, and turn the power to the navigation system back on. If this does not solve the problem, press **RESET** button on the navigation system.<br>• Update the software version of iPod. |

### Problems with the phone screen

| Symptom | Cause | Action (See) |
|---|---|---|
| Dialling is not possible because the touch panel keys for dialling are inactive. | Your phone is out of range for service. | Retry after re-entering the range for service. |
| | The connection between the mobile phone and the navigation system cannot be established now. | Perform the connection process. |

### If the screen becomes frozen...

Park your vehicle in a safe place, and cut off the engine. Turn the ignition key back to “Acc off”. Then start the engine again, and turn the power to the navigation system back on. If this does not solve the problem, press **RESET** button on the navigation system.

## Appendix

# Messages and how to react to them

The following messages may be displayed by your navigation system.
There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

### Messages for navigation functions

| Message | When | What to do (See) |
|---|---|---|
| **There is no "Pictures" folder. Please create /Pictures/ folder and store the appropriate files images to be uploaded in that Folder.** | Cannot load the image because "**Pictures**" folder is not found in the inserted external storage device. | Use the appropriate data and store the data properly. (Page 121) |
| | "**Pictures**" folder exists on the external storage device (USB, SD) but there is no loadable data in the folder. | Use the appropriate data and store the data properly. (Page 121) |
| **Data Read error.** | Failed to read the data for some reason. | Use the appropriate data and store the data properly. (Page 121) |
| **The file is corrupt** | The data is damaged or an attempt was made to set an image file that was not made to specifications as the splash screen. | Use the appropriate data and store the data properly. (Page 121) |
| **Connection failed.** | The mobile phone's Bluetooth wireless technology is turned off. | Activate the target phone's Bluetooth wireless technology. |
| | The mobile phone is paired (connected) with another device. | Cancel the pairing (connection) and retry. |
| | Rejection has been received from the mobile phone. | Operate the target phone and accept the connection request from the navigation system. (Furthermore, check the connection settings on your mobile phone.) |
| | The target mobile phone can not be found. | Check whether your mobile phone is activated and, whether the distance to your mobile phone is not too far. |
| **Could not find any available phone.** | No available phone exists in the surroundings when the system searches for connectable mobile phones featuring Bluetooth wireless technology. | • Activate the target phone's Bluetooth wireless technology.<br>• Check whether your mobile phone is activated and, whether the distance to your mobile phone is not too far. |
| **Dataloading failed.** | If you transferred the data from your mobile phone in a format can not be received with navigation system. | • Select just a suitable item, format, and then retry. (Page 58)<br>• Connect your mobile phone with another method again and retry. (Page 47) |
| **Your mobile phone can not support this feature.** | Connected mobile phone has no compatibility with the phone book transfer function of this navigation system. | Depending on the mobile phone, phone book transfer may not be available. |

# Appendix

## Messages for Audio Functions

When problems occur with AV source playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest Pioneer Service Centre.
The messages in "( )" will appear on the "Rear display".

### Built-in DVD drive

| Message | Cause | Action (See) |
|---|---|---|
| **Reading error** (**ERROR-02-XX**) | Dirty | Clean disc. |
| | Scratched disc | Replace disc. |
| | The disc is loaded upside down | Check that the disc is loaded correctly. |
| **Mechanism error** | Electrical or mechanical | Press **RESET** button. (Page 10) |
| **Region code error** (**DIFFERENT REGION DISC**) | The disc does not have the same region number as the navigation system. | Replace the DVD-Video with one bearing the correct region number. |
| **NON-PLAYABLE DISC** | This type of disc cannot be played by the navigation system | Replace the disc with one the navigation system can play. |
| **Thermal error** (**THERMAL PROTECTION IN MOTION**) | The temperature of the navigation system is outside of the normal operating range | Wait until the unit's temperature returns to within normal operating limits. |
| **Error not defined** (**ERROR-FF-FF**) | Undefined error | Press **RESET** button. (Page 10) |
| **Non-playable tracks are skipped.** (**FILE SKIPPED**) | Files that are protected by digital rights management. | The protected files are skipped. |
| **Impossible to play all tracks.** (**PROCETED DISC**) | All the files on the inserted disc are secured by DRM. | Replace disc. |
| **Flash writing error. Impossible to write on the flash.** (**CAN NOT SAVE DATA**) | The playback history for VOD contents cannot be saved for some reason. | • Try saving again.<br>• If the message appears frequently, consult your dealer. |
| **Authorization Error** (**AUTHORIZATION ERROR**) | The device does not match the device registered with the VOD provider. VOD contents cannot be played back. | Check whether this device has been registered with the VOD provider. |
| **File Error Non-playable file** | VOD rental contents file error | • Try saving again.<br>• If the message appears frequently, consult your dealer. |
| | Played back a disc with incompatible format. | Playback a disc with compatible format. |
| **Press track list to play and title will appear.** | The disc that has many files are played and all titles cannot be displayed at once. | Touch the one of listed items to play. |

### SD/USB/iPod

| Message | Cause | Action (See) |
|---|---|---|
| **Non-playable tracks are skipped.** | Files that are protected by digital rights management. | The protected files are skipped. |

# Appendix

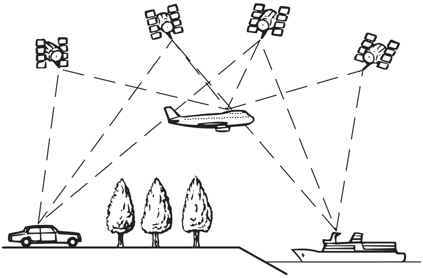
| | | |
|---|---|---|
| **Impossible to play all tracks.** | All the files on the inserted external storage device are secured by DRM. | Store playable files. |
| **An error occurred on USB connection. USB devices are not available to use and iPod power supply is also unavailable.** | The USB connector or USB cable is short-circuited. | Confirm that the USB connector or USB cable is not caught in something or damaged. |
| | The connected USB storage device consumes more than 500 mA (maximum allowable current). | Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB storage device. |
| | The USB interface cable for iPod is short-circuited. | Confirm that USB interface cable for iPod or USB cable is not caught in something or damaged. |
| **Connected iPod is not supported. Please check instruction manual.** | The iPod is not compatible with this navigation system. | Use an iPod with a compatible version. |
| **iPod connection failed. Please reconnect.** | Communication failure | • Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again.<br>• If the message appears frequently, consult your dealer. |

# Positioning technology

## Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



## Positioning by "Dead Reckoning"

The built-in sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the "Gyrosensor" and inclination of the road with the "G sensor".

The built-in sensor can even calculate changes of altitude, and corrects for discrepancies in the distance travelled caused by driving along winding roads or up slopes.

If you use this navigation system with connecting the speed pulse, the system will become more accurate than no connection of speed pulse. So you connect the speed pulse without fail to get the accuracy of positioning.

- ❒ The position of the speed detection circuit vary depending on the vehicle model. For details, consult your authorised Pioneer dealer or an installation professional.
- ❒ Some types of vehicles may not output a speed signal while driving at just a few kilometres per hour. In such a case, the current location of your vehicle may not be displayed correctly while in a traffic jam or in a vehicle park.

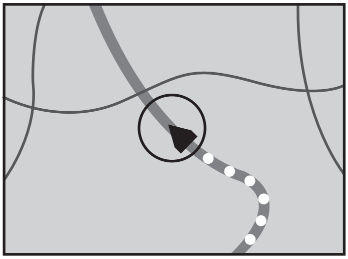
## How do GPS and "Dead Reckoning" work together?

For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the built-in sensor and used to correct it for improved accuracy.

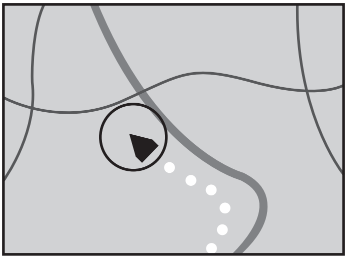
- ❒ If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. In such case, pressing **RESET** button initialise the sensor status and it may recover the accuracy to normal condition.

### Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



**With map matching**



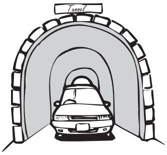
**Without map matching**

## Handling large errors

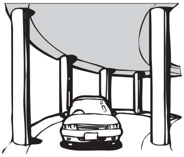
Positioning errors are kept to a minimum by combining GPS, “Dead Reckoning” and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

### When positioning by GPS is impossible

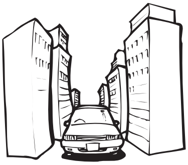
- If signals cannot be received from more than two GPS satellites, GPS positioning does not take place.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



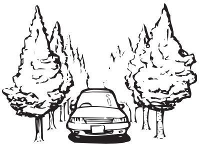
**In tunnels or enclosed parking garages**



**Under elevated roads or similar structures**



**When driving among high buildings**



**When driving through a dense forest or tall trees**

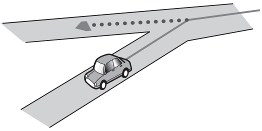
- If a car phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.
- Do not cover the GPS aerial with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the aerial clear.

❒ If a GPS signal have not been received for a long time, your vehicle’s actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

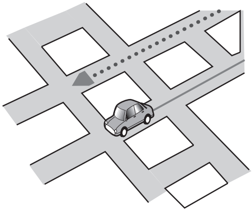
## Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are travelling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

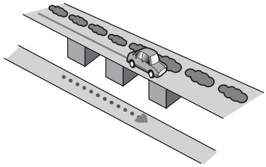
- If you make a slight turn.



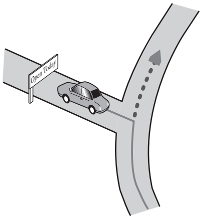
- If there is a parallel road.



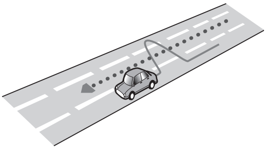
- If there is another road very nearby, such as in the case of an elevated motorway.



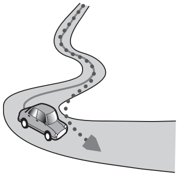
- If you take a recently opened road that is not on the map.



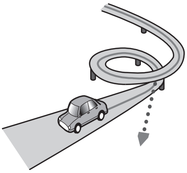
- If you drive in zigzags.



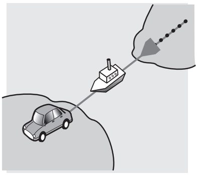
- If the road has connected hairpin bends.



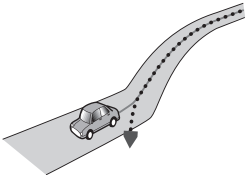
- If there is a loop or similar road configuration.



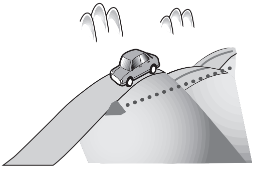
- If you take a ferry.



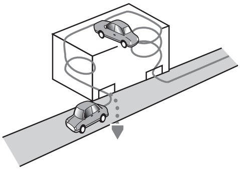
- If you are driving on a long, straight road or a gently curving road.



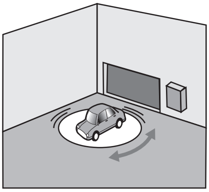
- If you are on a steep mountain road with many height changes.



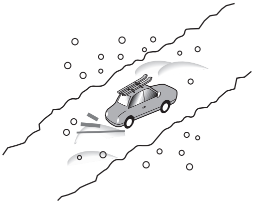
- If you enter or exit a multi-storey car park or similar structure with a spiral layout.



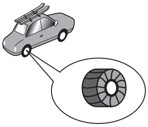
- If your vehicle is turned on a turntable or similar structure.



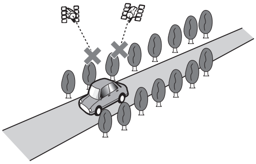
- If your vehicle's wheels spin, such as on a rough track or in snow.



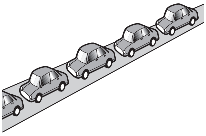
- If you put on chains, or change your tyres for ones with a different size.



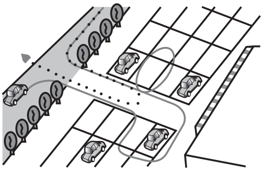
- If trees or other obstacles block the GPS signals for a considerable period.



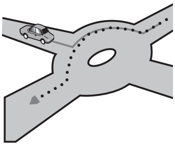
- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.



- If you join the road after driving around a large vehicle park.



- When you go round a roundabout.



- When starting driving immediately after starting the engine. ■

# Route setting information

## Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

# Appendix

**⚠ CAUTION**

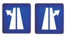
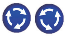
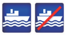
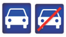
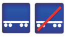
When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations at the time when the route was calculated is shown. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

- The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to pass. If you need to pass a certain street, set the waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the motorway are announced. However, if you pass intersections, turns, and other guide points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a motorway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic jam ahead, if driving through the traffic jam is better than taking the detour, a detour route may not be suggested.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.
- The number of roundabout exits displayed on the screen may differ from the actual number of roads.

## Route highlighting

- Once set, the route is highlighted in bright colour on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

## Supplemental information about directions

| Symbol | Meanings |
|---|---|
| | Motorway |
|  | Motorway exit left/right |
|  | Roudabout (clockwise and anti-clockwise) |
|  | Ferry (start and end) |
|  | Car only road (start and end) |
|  | Car train (start and end) |
| | Other information |

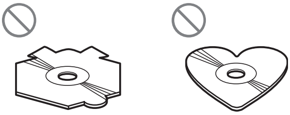
■

# Handling and care of the disc

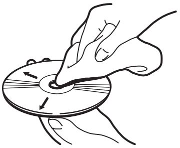
Some basic precautions are necessary when handling your discs.

## Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.



- Use 12-cm or 8-cm disc. Do not use an adapter when playing 8-cm discs.
- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a disc, wipe the disc with a soft cloth outward from the centre.



- Condensation may temporarily impair the built-in drive's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

## Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutoff protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear. ■

## Playable discs

### About DVD-Video and CD

DVD and CD discs that display the logos shown below generally can be played on this built-in DVD drive.

**DVD-Video**

**CD**

❐ DVD is a trademark of DVD Format/Logo Licensing Corporation.

❐ It is not possible to play DVD-Audio discs. This DVD drive may not be able to play all discs bearing the marks shown above.

## About AVCHD recorded discs

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected.

## About playing DualDisc

- DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this navigation system. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this navigation system.
- Frequent loading and ejecting of a DualDisc may result in scratches to the disc.
- Serious scratches can lead to playback problems on this navigation system. In some cases, a DualDisc may become stuck in the disc loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this navigation system.
- Please refer to the manufacturer for more detailed information about DualDiscs.

## About Dolby Digital

AVIC-F900BT will down-mix Dolby Digital signals internally and the sound will be output by the stereo. (Equipped with optical output for future extension.)

❒ Manufactured under licence from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

## About DTS sound

Only digital output of DTS sound is possible. If this unit’s optical digital outputs cannot be used, DTS sound will not be output, so select an audio track other than DTS sound.

“DTS” and “DTS Digital Out” are registered trademarks of DTS, Inc. ■

# Detailed information for playable media

## Compatibility

### Common notes about disc compatibility

- Certain functions of this product may not be available for some discs.
- Compatibility with all discs is not guaranteed.
- It is not possible to play back DVD-ROM/DVD-RAM discs.
- Playback of discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.

### DVD-Video discs

- DVD-Video discs that have incompatible region numbers cannot be played on this DVD drive. The region number of the player can be found on this product’s chassis.

### DVD-R/DVD-RW/DVD-R DL (Dual Layer) discs

- Unfinalised discs which have been recorded with the Video format (video mode) cannot be played back.
- Discs which have been recorded with the Video Recording format (VR mode) can be played back. However, unfinalised disc may not be played back. Unplayable disc should be finalised.
- DVD-R DL (Dual Layer) discs which have been recorded with Layer Jump recording cannot be played back.

- For more information about recording mode, please contact the manufacturer of media, recorders, or writing software.
- The following logo indicates that this unit is compatible with DVD-RW discs which have been recorded with the Video Recording format (VR mode).

**RW**
**COMPATIBLE**

## CD-R/CD-RW discs

- Unfinalised discs cannot be played back.
- It may not be possible to play back CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.
- Playback of discs recorded on a personal computer may not be possible depending on the recording device, writing software, their setting and another environment.
- Please record with the correct format. (For more details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

## Common notes about the external storage device (USB, SD)

- Depending on the kind of the external storage device (USB, SD) you use, this navigation system may not recognise the storage device or files may not be played back properly.
- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on an external storage device (USB, SD) with numerous folder hierarchies.
- Operations may vary depending on the kind of an external storage device (USB, SD).
- It may not be possible to play some music files from SD or USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.
- Video playback from SD or USB will be paused when the navigation is displayed.

## USB storage device compatibility

➲ For more details about USB storage device compatibility with this navigation system, refer to *Specifications* on page 166.

Protocol: bulk
Subclass: SCSI (06h)

- You cannot connect a USB storage device to this navigation system via a USB hub.
- Partitioned USB memory is not compatible with this navigation system.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Depending on the USB storage devices connected to this navigation system, noise may be generate on the radio.
- Do not connect anything other than the USB portable audio player/USB memory device.

# Appendix

### The sequence of audio files on USB memory

For USB portable audio players, the sequence is different from that of USB memory device and depends on the player.

### SD memory card and SDHC memory card

- For more details about SD memory card compatibility with this navigation system, refer to *Specifications* on page 166.

## Handling guidelines and supplemental information

- There is no compatibility for Multi Media Card (MMC).
- Copyright protected files cannot be played back.

## Notes unique to DivX files

- Only DivX files downloaded from DivX partner site are guarantee for proper operation. Unauthorised DivX file may not operate properly.
- DRM rental files cannot be operated until playing back is started.
- The navigation system corresponds to a DivX file display of up to 1 590 minutes 43 seconds. Search operations beyond this time limit are prohibited.
- DivX VOD file playback requires supplying the ID code of this navigation system to the DivX VOD provider. Regarding the ID code, refer to *Displaying your DivX® VOD registration code* on page 79.
- Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files.
- For more details about DivX, visit the following site:
  http://www.divx.com/

### DivX subtitle files

- Srt format subtitle files with the extension ".srt" can be used.
- Only one subtitle file can be used for each DivX file. Multiple subtitle files cannot be associated.
- Subtitle files that are named with the same character string as the DivX file before the extension are associated with the DivX file. The character strings before the extension must be exactly the same. However, if there is only one DivX file and one subtitle file in a single folder, the files are associated even if the file names are not the same.
- The subtitle file must be stored in the same folder as the DivX file.
- Up to 255 subtitle files may be used. Any more subtitle files will not be recognised.
- Up to 64 characters can be used for the name of the subtitle file, including the extension. If more than 64 characters are used for the file name, the subtitle file may not be recognised.
- The character code for the subtitle file should comply with ISO-8859-1. Using characters other than ISO-8859-1 may cause the characters to be displayed incorrectly.
- The subtitles may not be displayed correctly if the displayed characters in the subtitle file include control code.
- For materials that use a high transfer rate, the subtitles and video may not be completely synchronised.
- If multiple subtitles are programmed to display within a very short time frame, such as 0.1 seconds, the subtitles may not be displayed at the correct time.

# Appendix

## Media compatibility chart

### General

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File system | ISO9660 level 1,<br>ISO9660 level 2,<br>Romeo and Joliet | ISO9660 level 1,<br>ISO9660 level 2,<br>Romeo, Joliet and UDF 1.02 | FAT16/FAT32 | |
| Maximum number of folders | 255 | | FAT32: No limit.<br>FAT16: 512 (including files) | |
| Maximum number of files | 999 | 3 500 | FAT32: No limit.<br>FAT16: 512 (including folders) | |
| Playable file types | MP3, WMA, AAC, DivX | | MP3, WMA, AAC, WAV, AVI, MPEG-4 | |

### MP3 compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | .mp3 | | | |
| Bit rate | 8 kbps to 320 kbps (CBR), VBR | | | |
| Sampling frequency | 16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis) | | 16 kHz to 48 kHz | |
| ID3 tag | ID3 Tag Ver. 1.0, 1.1, 2.2, 2.3 | | ID3 Tag Ver. 1.0, 1.1, 2.3 | |

**Notes:**
- Ver. 2.x of ID3 Tag is given priority when both Ver. 1.x and Ver. 2.x exist.
- There is no compatibility with the followings:
  MP3i (MP3 interactive), mp3 PRO, m3u playlist

# Appendix

## WMA compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | .wma | | | |
| Bit rate | 5 kbps to 320 kbps (CBR), VBR | | Ver. 9: 5 kbps to 320 kbps (CBR), VBR<br>Ver. 7 or 8: 128 kbps to 192 kbps (CBR), VBR | |
| Sampling frequency | 8 kHz to 48 kHz | | | |
| **Note:**<br>• There is no compatibility with the followings: Windows Media Audio 9 Professional, Lossless, Voice | | | | |

## WAV compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | AVIC-F900BT cannot play WAV files on the built-in DVD drive. | | .wav | |
| Format | | | Linear PCM (LPCM), IMA-ADPCM | |
| Sampling frequency | | | LPCM: 16 kHz to 48 kHz<br>IMA-ADPCM: 22.05 kHz and 44.1 kHz | |
| Quantization bits | | | LPCM: 8 bits and 16 bits<br>IMA-ADPCM: 3 bits and 4 bits | |
| **Note:**<br>The sampling frequency shown in the display may be rounded. | | | | |

## AAC compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | .m4a | | | |
| Bit rate | 16 kbps to 320 kbps (CBR) | | 8 kbps to 320 kbps (CBR) | |
| Sampling frequency | 8 kHz to 44.1 kHz | | | |

**Notes:**
- The navigation system plays back AAC files encoded by iTunes®.
- There is no compatibility with the followings:
  Apple Lossless, files encoded with VBR

## DivX compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | .avi/.divx | | DivX files on the external storage device (USB, SD) cannot be played. | |
| Profile (DivX version) | Home Theater Ver. 3.11/Ver. 4.x/Ver. 5.x/ Ver. 6.x | | | |
| Compatible audio codec | MP3, Dolby Digital | | | |
| Bit rate (MP3) | 8 kbps to 320 kbps (CBR), VBR | | | |
| Sampling frequency (MP3) | 16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis) | | | |
| Maximum image size | 720 × 576 pixels. | | | |
| Maximum file size | 4 GB | | | |

**Notes:**
- There is no compatibility with the followings:
  DivX Ultra format, DivX files without video data, DivX files encoded with LPCM (Linear PCM) audio codec
- Depending on the file information composition such as the number of audio streams, there may be a slight delay in the start of playback on discs.
- If a file contains more than 4 GB, playback is stopped halfway.
- Some special operations may be prohibited because of the composition of DivX files.
- Files with high transfer rates may not be played back correctly. The standard transfer rate is 4 Mbps for CDs and 10.08 Mbps for DVDs.

# Appendix

## AVI compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | AVI files cannot be played on the built-in drive. | | .avi | |
| Compatible video codec | | | MPEG-4 | |
| Compatible audio codec | | | ADPCM | |
| Recommended video specifications | | | Image size: VGA (640 x 480)<br>Bit rate: 480 kbps<br>Frame rate: 24 fps | |

## MPEG-4 compatibility

| Media | CD-R/-RW | DVD-R/-RW/-R DL | USB storage device | SD memory card |
|---|---|---|---|---|
| File extension | MPEG-4 files cannot be played on the built-in drive. | | .mp4 | |
| Compatible video codec | | | MPEG-4 | |
| Compatible audio codec | | | AAC | |
| Recommended video specifications | | | Image size: VGA (640 x 480)<br>Bit rate: 480 kbps<br>Frame rate: 24 fps | |

## Common notes

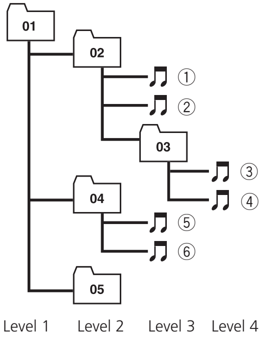
- The navigation system may not operate correctly depending on the application used to encode WMA files.
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- There is no compatibility with packet write data transfer.
- This navigation system can recognise 32 characters beginning with the first character, including extension for the file and folder name. Depending on the display area, the navigation system try to display them with changing the font size to smaller. However, the maximum number of the characters that you can display varies according to the width of each character or display area.
- Folder selection sequence or other operation may be altered depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

### Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

🗀: Folder

♫: File



**Notes**

- This product assigns folder numbers. The user can not assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. (The blank list will appear.) Also, these folders will be skipped without displaying the folder number. ■

## About Bluetooth

Bluetooth is a short-range wireless radio connectivity technology that is developed as a cable replacement for mobile phones, handheld PCs and other devices. Bluetooth operates in 2.4 GHz frequency range and transmits voice and data at speeds up to 1 megabit per second. Bluetooth was launched by a special interest group (SIG) that comprises of Ericsson Inc., Intel Corp., Nokia Corp., Toshiba and IBM in 1998, and it is currently developed by nearly 2 000 companies worldwide.

- The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Pioneer Corporation is under license. Other trademarks and trade names are those of their respective owners. ■

## About SD and SDHC logo

SD Logo is a trademark.

SDHC Logo is a trademark. ■

## About WMA

The Windows Media™ logo printed on the box indicates that this unit can play back WMA data. WMA is short for Windows Media Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later. Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. ■

## About DivX

DivX is a compressed digital video format created by the DivX® video codec from DivX, Inc. This unit can play DivX video files recorded on CD-R/RW/ROM and DVD-R/RW/ROM discs. Keeping the same terminology as DVD video, individual DivX video files are called “Titles”. When naming files/titles on a CD-R/RW or a DVD-R/RW disc prior to burning, keep in mind that by default they will be played in alphabetical order. Official DivX® Certified product. Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files.

❒ DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license. ■

## About AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes® version 4.6.

❒ iTunes is a trademark of Apple Inc., registered in the U.S. and other countries. ■

## Detailed information regarding connectable iPods

**CAUTION**

- Pioneer accepts no responsibility for data lost on the iPod even if that data is lost while using the navigation system.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or accelerator pedal.

For details, refer to the iPod’s manuals. ■

## Using the LCD screen correctly

### Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this navigation system, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in “*Specifications*”.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range because the LCD screen may not operate normally and the LCD screen can be damaged.

- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the Touch Panel functions. The LCD screen can scratch easily. (The stylus is supplied for special calibrations. Do not use the stylus for normal operation.)

## Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the navigation unit, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a problem with the LCD screen.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of  disturbances such as spots or coloured stripes.

## Maintaining the LCD screen

- When removing dust from the LCD screen or cleaning it, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

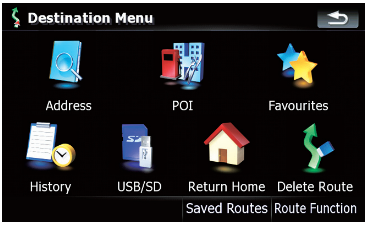
## LED (light-emitting diode) backlight

A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dark and the image will no longer be projected. In this case, please consult your dealer or the nearest authorised PIONEER Service Station. ■

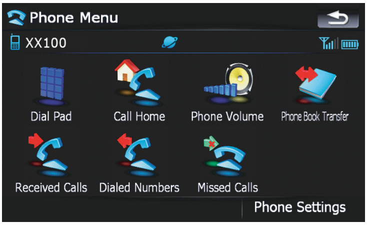
# Display information

## Destination Menu


Destination Menu
Address
POI
Favourites
History
USB/SD
Return Home
Delete Route
Saved Routes
Route Function

| | | Page |
|---|---|---|
| [**Address**] | | 25 |
| [**POI**] | | |
| | [**Around Current GPS Location**] | 28 |
| | [**Around Destination**] | 28 |
| | [**Around Cursor**] | 27 |
| | [**Along Route**] | 28 |
| | [**Saved Criteria**] | 29 |
| | [**Register Search Criteria**] | 28 |
| [**Favourites**] | | 33 |
| [**History**] | | 32 |
| [**USB/SD**] | | 30 |
| [**Return Home**] | | 34 |
| [**Delete Route**] | | 46 |
| [**Saved Routes**] | | 34 |
| [**Route Function**] | | |
| | [**Route info**] | 42 |
| | [**Itinerary**] | 43 |
| | [**Edit Route**] | 45 |
| | [**Save Route**] | 45 |
| | [**Coordinate**] | 31 |

## Phone Menu

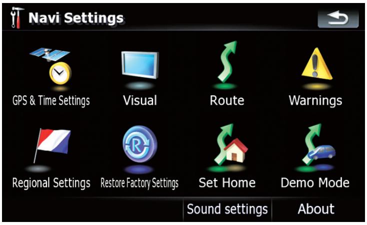

Phone Menu
XX100
Dial Pad
Call Home
Phone Volume
Phone Book Transfer
Received Calls
Dialed Numbers
Missed Calls
Phone Settings

| | | Page |
|---|---|---|
| [**Dial Pad**] | | 52 |
| [**Call Home**] | | 53 |
| [**Phone Volume**] | | 55 |
| [**Phone Book Transfer**] | | 54 |
| [**Received Calls**] | | 52 |
| [**Dialed Numbers**] | | 52 |
| [**Missed Calls**] | | 52 |
| [**Phone Settings**] | | |
| | [**Connection**] | 50 |
| | [**Bluetooth On/Off**] | 56 |
| | [**Auto Answer Preference**] | 56 |
| | [**Refuse All Calls**] | 56 |
| | [**Echo Cancel**] | 57 |
| | [**Auto Connect**] | 57 |
| | [**Edit Name**] | 57 |
| | [**Clear Memory**] | 55 |
| | [**Bluetooth Software Update**] | 58 |

# Appendix

## Settings Menu

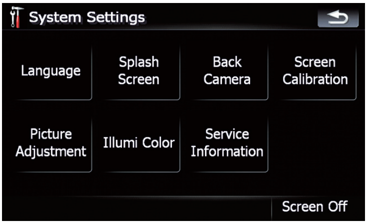
### Navi Settings


Navi Settings
GPS & Time Settings
Visual
Route
Warnings
Regional Settings
Restore Factory Settings
Set Home
Demo Mode
Sound settings
About

| | | Page |
|---|---|---|
| [GPS & Time Settings] | | 108 |
| | [Time Settings] | 109 |
| [Visual] | | |
| | [3D Settings] | 110 |
| | [Map Settings] | 110 |
| | [Displayed Info] | 111 |
| | [Smart Zoom] | 111 |
| | [Overview Mode] | 112 |
| | [Manage POI] | 116 |
| | [Manage Track Logs] | 118 |
| [Route] | | 112 |
| | [Method:] | 113 |
| | [U-turn penalty:] | 113 |
| | [Unpaved Roads] | 113 |
| | [Motorways] | 113 |
| | [Ferries] | 113 |
| | [U-turns] | 113 |
| | [Permit Needed] | 113 |
| | [Toll Roads] | 113 |
| [Warnings] | | 113 |
| | [Warn When Speeding] | 114 |
| | [Enable Speed Camera] | 114 |
| [Regional Settings] | | 114 |
| [Restore Factory Settings] | | 115 |
| [Set Home] | | 119 |
| [Demo Mode] | | 115 |
| [Sound settings] | | 115 |
| [About] | | 116 |

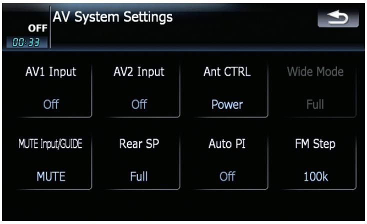
# Appendix

## System Settings menu


System Settings
Language
Splash Screen
Back Camera
Screen Calibration
Picture Adjustment
Illumi Color
Service Information
Screen Off

| | Page |
|---|---|
| [**Language**] | 120 |
| [**Splash Screen**] | 121 |
| [**Back Camera**] | 121 |
| [**Screen Calibration**] | 122 |
| [**Picture Adjustment**] | 123 |
| [**Illumi Color**] | 123 |
| [**Service Information**] | 124 |
| [**Screen Off**] | 124 |

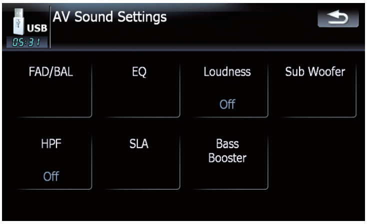
## AV Settings menu


AV System Settings
OFF
00:33
AV1 Input
Off
AV2 Input
Off
Ant CTRL
Power
Wide Mode
Full
MUTE Input/GUIDE
MUTE
Rear SP
Full
Auto PI
Off
FM Step
100k

| | Page |
|---|---|
| [**AV1 Input**] | 128 |
| [**AV2 Input**] | 128 |
| [**Ant CTRL**] | 129 |
| [**Wide Mode**] | 129 |
| [**MUTE Input/GUIDE**] | 129 |
| [**Rear SP**] | 130 |
| [**Auto PI**] | 130 |
| [**FM Step**] | 130 |

# Appendix

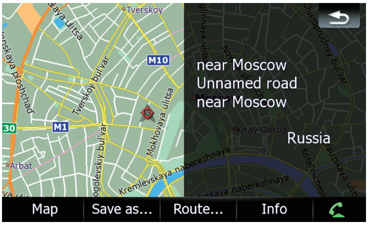
## AV Sound menu


USB
05:31
AV Sound Settings
FAD/BAL
EQ
Loudness
Off
Sub Woofer
HPF
Off
SLA
Bass Booster

| | Page |
|---|---|
| [**FAD/BAL**] ([**Balance**]) | 124 |
| [**EQ**] | 125 |
| [**Loudness**] | 126 |
| [**Sub Woofer**] | 127 |
| [**HPF**] | 127 |
| [**SLA**] | 127 |
| [**Bass Booster**] | 128 |

## Shortcut menu

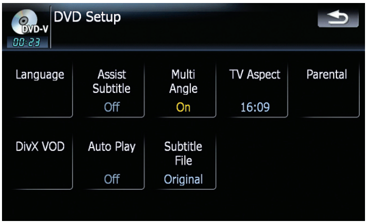
### Map Confirmation Screen


Tverskoy
M10
M1
30
Arbat
Kitay-Gorod
near Moscow
Unnamed road
near Moscow
Russia
Map
Save as…
Route…
Info

| | Page |
|---|---|
| [**Map**] | 35 |
| [**Save as…**] | 37 |
| [**Add Pin**] | 38 |
| [**Add POI**] | 39 |
| [**Add Favourite**] | 40 |
| [**Add Cam**] | 40 |
| [**Route…**] | 36 |
| [**Go Here Now**] | 37 |
| [**Add Via**] | 37 |
| [**Continue**] | 37 |
| [**Starting Point**] | 38 |
| [**Info**] | 38 |

# Appendix

## DVD Setup


DVD-V
00:23
DVD Setup
Language
Assist Subtitle
Off
Multi Angle
On
TV Aspect
16:09
Parental
DivX VOD
Auto Play
Off
Subtitle File
Original

| | Page |
|---|---|
| [**Language**] | 77 |
| [**Assist Subtitle**] | 77 |
| [**Multi Angle**] | 78 |
| [**TV Aspect**] | 78 |
| [**Parental**] | 78 |
| [**DivX VOD**] | 79 |
| [**Auto Play**] | 79 |
| [**Subtitle File**] | 80 |

■

## Glossary

**AAC**
AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4.

**Aspect ratio**
This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

**Bit rate**
This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

**Built-in sensor**
The built-in sensor that enables the system to estimate your vehicle's position.

**CD-DA**
This stands for a general music CD (commercial-release audio CD). In this manual, this word is sometime used for a distinction between data CD (includes the compressed audio file) and the general music CD.

**Chapter**
Titles of DVD-Video or DVD-VR are in turn divided into chapters which are numbered in the same way as the chapters of a book. With discs featuring chapters, you can quickly find a desired scene with chapter search.

**Current location**
The present location of your vehicle; your current location is shown on the map by a red triangle mark.

**Destination**
A location you choose as the end point of your journey.

**DivX**
DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can create your own using your personal content and easy-to-use tools from DivX.com.

**DivX Certified**
DivX Certified products are officially tested by the creators of DivX and guaranteed to play all versions of DivX video, including DivX 6.

**Favourites**
A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

**GPS**
Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

**Guidance mode**
The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

**Guidance point**
These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the yellow flag icon.

**Home location**
Your registered home location.

# Appendix

### ID3 tag

This is a method of embedding track-related information in a MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted by the number of characters, the information can be viewed when the track is played back.

### ISO9660 format

This is the international standard for the format logic of DVD/CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels:

**Level 1:**

The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters, half-byte numerals and the "_" sign, with a file-extension of three characters).

**Level 2:**

The file name can have up to 31 characters (including the separation mark "." and a file extension). Each folder contains less than 8 hierarchies.

**Extended formats**

Joliet:

File names can have up to 64 characters.

Romeo:

File names can have up to 128 characters.

- **Level 1:**
  The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters, half-byte numerals and the "_" sign, with a file-extension of three characters).
- **Level 2:**
  The file name can have up to 31 characters (including the separation mark "." and a file extension). Each folder contains less than 8 hierarchies.
- **Extended formats**
  Joliet:
  File names can have up to 64 characters.
  Romeo:
  File names can have up to 128 characters.

### JPEG

This stands for Joint Photographic Experts Group, and is an international still image compression standard.

### MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard established by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the size of a conventional disc.

### MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard.

### Multi-angle

With regular TV programmes, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

### Multi-audio (Multilingual dialogue)

Some videos feature dialogue recorded in multiple languages or audio recorded in multiple tracks. For example, dialogue in up to 8 languages can be recorded on a single DVD-Video, letting you choose the language as desired.

### Multi-session

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than 2 sessions in one disc.

### Multi-subtitle

For example, subtitles in up to 32 languages can be recorded on a single DVD-Video, letting you choose as desired.

## Appendix

**Packet write**
This is a general term for a method of writing on CD-R, etc. at the time required for a file, just as is done with files on floppy or hard disks.

**Parental lock**
Some DVD-Video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

**Phone book**
An address book on user's phone is collectively referred to as "Phone book". Depending on the mobile phone, "Phone book" may be called a name such as "Contacts", "Business card" or something else.

**Point of Interest (POI)**
Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

**RDS-TMC**
A communication system for informing drivers of the latest traffic information using FM multiplex broadcast. Information such as traffic jams or accidents can be checked on the display.

**Region number**
DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player.

**Route setting**
The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

**Set route**
The route marked out by the system to your destination. It is highlighted in bright colour on the map.

**Title**
DVD-Video or DVD-VR discs have a high data capacity, enabling recording of multiple movies on a single disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

**Track log**
Your navigation system logs your course that you already pass through if the track logger is activated. This recorded course is called "track log". It is handy when you want to check a route travelled or if returning along a complex route.

**VBR**
VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression-priority sound quality.

**Voice guidance**
The giving of directions by navigation voice while in guidance.

**Waypoint**
A location that you choose to visit before your destination; a journey can be built up from multiple way points and the destination.

**WMA**
WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. ■

## Appendix

# Specifications

### General

| | |
|---|---|
| Rated power source | 14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC) |
| Earthing system | Negative type |
| Maximum current consumption | 10.0 A |
| Dimensions (W × H × D): | |
| DIN | |
| Chassis | 178 mm × 100 mm × 149 mm |
| Nose | 188 mm × 117 mm × 16 mm |
| D | |
| Chassis | 178 mm × 100 mm × 157 mm |
| Nose | 170 mm × 96 mm × 8 mm |
| Weight | 2.7 kg |
| NAND flash memory | 2 GB |

### Navigation

| | |
|---|---|
| GPS Receiver: | |
| System | L1, C/Acode GPS<br>SPS (Standard Positioning Service) |
| Reception system | 30-channel multi-channel reception system |
| Reception frequency | 1 575.42 MHz |
| Sensitivity | –140 dBm (typ) |
| Position update frequency | Approx. once per second |
| GPS aerial: | |
| Aerial | Micro strip flat aerial/right-handed helical polarisation |
| Aerial cable | 5.0 m |
| Dimensions (W × H × D) | 33 mm × 15 mm × 36 mm |
| Weight | 96 g |

### Display

| | |
|---|---|
| Screen size/aspect ratio | 5.8 inch wide/16:9 (effective display area: 128 mm × 72 mm) |
| Pixels | 384 000 (800 × 480) |
| Display method | TFT Active matrix driving |
| Colour system | NTSC/PAL compatible |
| Durable temperature range: | |
| Power on | –10 °C to +60 °C |
| Power off | –20 °C to +80 °C |

### Audio

| | |
|---|---|
| Maximum power output | 50 W × 4<br>50 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for subwoofer) |
| Continuous power output | 22 W × 4 (50 Hz to 15 kHz, 5 %THD, 4 Ω LOAD, Both Channels Driven) |
| Load impedance | 4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch] allowable) |
| Preout output level (max) | 2.2 V |
| Preout impedance | 1 kohm |
| Equaliser (3-Band Parametric Equaliser): | |
| Low | |
| Frequency | 40 Hz/80 Hz/100 Hz/160 Hz |
| Q Factor | 0.35/0.59/0.95/1.15 (+6 dB when boosted) |
| Gain | ±12 dB |
| Mid | |
| Frequency | 200 Hz/500 Hz/1 kHz/2 kHz |
| Q Factor | 0.35/0.59/0.95/1.15 (+6 dB when boosted) |
| Gain | ±12 dB |
| High | |
| Frequency | 3.15 kHz/8 kHz/10 kHz/12.5 kHz |
| Q Factor | 0.35/0.59/0.95/1.15 (+6 dB when boosted) |
| Gain | ±12 dB |
| Loudness contour: | |
| Low | +3.5 dB (100 Hz), +3 dB (10 kHz) |
| Mid | +10 dB (100 Hz), +6.5 dB (10 kHz) |
| High | +11 dB (100 Hz), +11 dB (10 kHz)<br>(volume: –30 dB) |
| HPF: | |
| Frequency | 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz |
| Slope | –12 dB/oct |
| Subwoofer: | |
| Frequency | 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz |
| Slope | –18 dB/oct |
| Gain | –24/+6 dB |
| Phase | Normal/Reverse |
| Bass boost: | |
| Gain | 0 dB to +12 dB |

### DVD Drive

| | |
|---|---|
| System | DVD-Video, CD, MP3, WMA, AAC, DivX system |
| Usable discs | DVD-Video, CD, MP3, WMA, AAC, DivX |

# Appendix

Region number ........ 5
Signal format:
  Sampling frequency ..... 44.1 kHz/48 kHz/96 kHz
  Number of quantization bits ........ 16 bit/20 bit/24 bit; linear
Frequency response ........ 5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio ........ 97 dB (1 kHz) (IEC-A network) (CD: 96 dB (1 kHz) (IEC-A network))
Dynamic range ........ 95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion ........ 0.008 % (1 kHz)
Output level:
  Video ........ 1.0 Vp-p/75 Ω (±0.2 V)
  Audio ........ 1.0 V (1 kHz, 0 dB)
Number of channels ........ 2 (stereo)
MP3 decoding format ........ MPEG-1 & 2 Audio Layer 3
WMA decoding format ........ Ver.9.0 L3
AAC decoding format ........ MPEG-4 AAC (only encoded by iTunes): .m4a
DivX decoding format ........ Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X : .avi, .divx

## USB

USB standard spec. ........ USB 2.0 High Speed
Max current supply ........ 500 mA
Max capacity memory ........ 2 GB
File system ........ FAT16, FAT32
USB class ........ Mass storage class
Decoding format ........ MP3/WMA/AAC/WAVE/MPEG4

## SD

Compatible physical format ........ Version 2.00
Max capacity memory ........ 8 GB
File system ........ FAT16, FAT32
Decoding format ........ MP3/WMA/AAC/WAVE/MPEG4

## Bluetooth

Version ........ Bluetooth 1.2 certified
Output power ........ +4 dBm Max. (Power class 2)

## FM tuner

Frequency range ........ 87.5 MHz to 108.0 MHz
Usable sensitivity ........ 8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio ........ 75 dB (IEC-A network)
Distortion ........ 0.3 % (at 65 dBf, 1 kHz, stereo)
  0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ........ 30 Hz to 15 000 Hz (±3 dB)
Stereo separation ........ 45 dB (at 65 dBf, 1 kHz)

## MW tuner

Frequency range ........ 531 kHz to 1 602 kHz (9 kHz)
Usable sensitivity ........ 18 µV (S/N: 20 dB)
Signal-to-noise ratio ........ 65 dB (IEC-A network)

## LW tuner

Frequency range ........ 153 kHz to 281 kHz (9 kHz)
Usable sensitivity ........ 30 µV (S/N: 20 dB)
Signal-to-noise ratio ........ 65 dB (IEC-A network)

**Note**

Specifications and design are subject to possible modifications without notice due to improvements. ■

**http://www.pioneer.eu**

Visit **www.pioneer.co.uk** (or **www.pioneer.eu** ) to register your product.
Visite **www.pioneer.es** (o **www.pioneer.eu** ) para registrar su producto.
Zum Registrieren Ihres Produktes besuchen Sie bitte **www.pioneer.de** (oder **www.pioneer.eu** ) .
Visitez **www.pioneer.fr** (ou **www.pioneer.eu** ) pour enregistrer votre appareil.
Si prega di visitare il sito **www.pioneer.it** (o **www.pioneer.eu** ) per registrare il prodotto.
Bezoek **www.pioneer.nl** (of **www.pioneer.eu** ) om uw product te registreren.
Посетите **www.pioneer-rus.ru** (или **www.pioneer.eu** ) для регистрации приобретенного Вами изделия.

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